

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 184731

TO: Minh-Tam Davis

Location: REM/3a24/3c18

Art Unit: 1642 Apr. 1 12, 2006

Case Serial Number: 09/277064

From: P. Sheppard

Location: Remsen Building

Phone: (571) 272-2529

sheppard@uspto.gov

Search Notes	

STIC-Biotech/ChemLib

From:

Chan, Christina

Sent:

Monday, April 10, 2006 8:16 AM

To:

Davis, Minh-Tam; STIC-Biotech/ChemLib

Subject:

RE: Rush search request for 09/277064

Please tush. Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644 (571)-272-0841 Remsen, 3E89

-----Original Message-----

From:

Davis, Minh-Tam

Sent:

Friday, April 07, 2006 12:27 PM

To:

Chan, Christina

Subject:

Rush search request for 09/277064

Please search in commercial database, issued patent files and PGPUB: SEQ ID NO:12, with size limitation to the size of the sequence. Thank you.

MINH TAM DAVIS

ART UNIT 1642, ROOM 3A24, MB 3C18

27-0830

Searcher: ______ Searcher Phone: _____ Date Searcher Picked up: _____ Date completed: _____ Searcher Prep Time: _____ Online Time: _____

Type of Search

NA# _____ AA#:___

S/L: ____ Oligomer:____

Encode/Transl:____

Structure #: ____ Text:___

Inventor: ____ Litigation:____

endors and cost where applicable
STN:
DIALOG:
QUESTEL/ORBIT:
LEXIS/NEXIS:
SEQUENCE SYSTEM:
WWW/Internet:
Other (Specify):

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April 11, 2006, 19:27:15 ; Search time 188 Seconds (without alignments) 23.371 Million cell updates/sec
GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
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                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                 2443163 seqs, 439378781 residues
                                                                          OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                       Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                      US-09-277-064-12
51
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                                                                                                                                                                                                                                                                       BLOSUM62
                                                                                                                                                                                        Title:
Perfect score:
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                                                                                                                Run on:
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Minimum DB seq length: 0 Maximum DB seq length: 20000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries A Geneseq 21:* Database

geneseqp2003as:* geneseqp2003bs:* geneseqp1980s:* geneseqp1990s:* geneseqp2000s:* geneseqp2001s:* geneseqp2002s:* geneseqp2005s:* geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Score	1	% Query Match Length DB	80	ΩI	Description
51	100.0	10	7	AAR61525	Aar61525 Peptide f
51	100.0	10	N	AAR97508	Aar97508 Cytotoxic
5	100.0	10	ď	AAW36826	Aaw36826 Immunogen
51	100.0	10	~	AAW70071	Aaw70071 HER-2/neu
5	100.0	10	7	AAW77132	Aaw77132 HER-2/neu
5	100.0	10	4	AAB99690	Aab99690 HLA A2 bi
5	100.0	10	4	AAG89003	Aag89003 HER2/neu
21	100.0	10	4	AAG88772	Aag88772 HER2/neu
21	100.0	10	Ŋ	ABB76755	Abb76755 Tumour an
51	100.0	10	S	AAE26800	Aae26800 Human HLA
21	100.0	10	ß	AEA36306	Aea36306 Human HER
5	100.0	10	φ	ABU63012	Abu63012 Human Her
21	100.0	10	8	ADE97756	Ade97756 Immunogen
21	100.0	10	æ	ADM12647	Adm12647 MHC class
51	100.0	10	8	ADO38880	Ado38880 Human Her
51	100.0	10	8	ADP79761	Adp79761 Human HLA
51	100.0	15	m	AAY98861	Aay98861 HLA class
51	100.0	15	4	AAG88322	Aag88322 HER2/NEU
51	100.0	15	4	AAG88306	Aag88306 HER2/NEU
51	100.0	15	4	AAG89058	Aag89058 HER2/neu
2	100.0	15	4	AAG89031	Aag89031 Her2/neu
51	100.0	15	4	AAG89114	Aag89114 HER2/neu
51	100.0	18	S	ABJ04191	
51	100.0	18	9	ABU54238	Abu54238 ErbB2 pro

Adk72373 HER-2 pep Adm12649 I1-key/hu Ado38882 Human Her Adk72377 Human HER	Aay43967 Human pro Ads87905 HBR2/ErbB Aca39008 Rat Her-2 Adr10480 Human pro	A0790529 numan spi A0780498 Human epi Aae20483 Human pro Aae20481 Human pro Aae20484 Human pro	Human BCG-HE Cancer Human	Ady30514 Human spl Ady30513 Human spl Ady30509 Human spl Adm29352 Human nov
ADK72373 ADM12649 ADO38882 ADK72377	AAY43967 ADS87905 AEA39008 ADR10480	ADP80498 AAB20483 AAB20481 AAB20484	AAB20482 ADK72375 ADT50879 ADY30511	ADY30514 ADY30513 ADY30509 ADM29352
222 8 122 8 122 8	265 289 391 931 935 8	88300 8730 8730	200 5 71 8 15 8 35 9	879 9 960 9 970 9
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ALIGNMENTS

RESULT 1

Peptide fragment (1.0738) of c-ERB2 binds HLA-A2.1. AAR61525 standard; peptide; 10 AA. (revised)
(first entry) 25-MAR-2003 11-MAY-1995 AAR61525; AAR61525

antigen; epitope; immunogenic target protein; PSA; HBVc; HBVs; EBV; HIVI; plasma specific antigen; hepatitis B virus; Epstein Barr; human immunodeficiency virus; human papilloma virus; p53; c-ERB2; MAGE-1; melanoma antigen-1; ore antigen; surface antigen; pharmaccutical composition; in vivo; ex vivo; therapeutic; diagnostic; MHC class I molecule; major histocompatability complex; HLA-A2.1; 9mer; 10mer; anchor; human leukocyte antigen.

WO9420127-A1. Homo sapiens. 15-SEP-1994.

93US-00027146. 93US-00073205. 93US-00159184. 94WO-US002353 05-MAR-1993; 04-JUN-1993; 29-NOV-1993; 04-MAR-1994;

Sidney J, Grey HM, Sette A, (CYTE-) CYTEL CORP.

WPI; 1994-302678/37.

Kast W;

Immunogenic peptide(s) having an HLA-A2.1 binding motif - used for treatment or prophylaxis of cancer, virus infection or autoimmune diseases

Example 5; Page 108; 138pp; English.

AAR59496-R61666 are immunogenic 10mer peptides that contain a HLA-A2.1 binding motif. These peptides bind HLA-A2.1 and have a binding a affinity of at least 1% as compared to a reference peptide (AAR71293). AAR61525 has an ICSO of 0.018 and the sequence occurs at position 773 in the human

(first entry)

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Nucleic acid encoding variable regions of HLA-restricted non-human T cell receptor specific for tumour antigen - used to identify tumour antigens
                                                                                                                                           cytotoxic T lymphocyte; CTL; immune response; tumour-associated antigen; T-cell receptor; TCR; tumour treatment.
                                                                                                       Immunogenic peptide H7 based on the human Her-2/neu protein.
                                                                                                                                 Her-2/neu protein; human leukocyte antigen A2.1; HLA;
                           AAW36826 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                  (SCRI ) SCRIPPS RES INST
                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-470496/43.
                                                                                                                                                                                                                                                                               05-MAR-1997;
                                                                                                                                                                                                                                                                                                           JS-MAR-1996;
                                                                                                                                                                                                   Нощо варіепв
                                                                             23-MAR-1998
                                                                                                                                                                                                                           WO9732603-A1
                                                                                                                                                                                                                                                                                                                                                              Sherman LA,
                                                                                                                                                                                     Synthetic.
                                                     AAW36826;
  RESULT 3
                 AAW36826
                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ARR97508 is a peptide capable of activating cytotoxic T lymphocytes (CTLs) which specifically target malignant cells. The peptide corresponds to amino acids 773-782 of human Her-2/Neu protein. CTL- activating peptides can be used in a vaccine for protecting against tumour cell formation. CTLs activated by the peptides will lyse tumour cells displaying specific peptides. Antibodies against CTL- activating peptides are useful for the identification of other similar compounds which may be useful for treating cancer or virally-infected cells, or for diagnosis. The peptide and vaccines produced provide immunity to a high percentage of different ethnic groups, i.e. those with different HLA alleles
c-ERB2 gene product. Peptides of the invention can induce cytotoxic T hymphocytes which can react with target cells. They can be used for the treatment or prophlyaxis of cancer, eg. prostate cancer or lymphoma, etc. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                p53; Her-2; Neu; aa; amino acid; CTL; cytotoxic T lymphocyte; target; malignant cell; antigenic; vaccine; immunisation; activation.
                                                                                                                       Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    In vivo activation of tumour-specific cytotoxic T lymphocytes - by contacting with polypeptide(s) derived from human p53 or Her-2/Neu
                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                       Cytotoxic T lymphocyte-activating Her-2/Neu-specific peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 51; DB 2; Length 10; 100.0%; Pred. No. 0.013; ive 0; Mismatches 0; Indels
                                                                                          100.0%; Score 51; DB 2; Length 10; 100.0%; Pred. No. 0.013; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                          AAR97508 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 5; Page 124; 158pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94US-0035558
                                                                                                                                                                                                                                                                                              11-FEB-1997 (first entry)
                                                                                          Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                1 VMAGVGSPYV 10
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                                                                   Sequence 10 AA;
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                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                  WO9618409-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                           20-JUN-1996.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sherman LA;
                                                                                                                                                                                                                                                                     AAR97508;
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Lustgarten J;

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Synthetic peptides AAW36824-40 are based on the sequence of the human Her 2/neu protein, wherein each sequence contains the anchor motif for human 12 leukocyte antigen (HLA) A2.1. The present peptide is based on positions 773-782. The ability of these peptides to inhibit the binding of an influenza virus matrix protein peptide M1 to HLA A2.1 was measured by inhibition of lysis by an M1 specific, HLA A2.1 restricted, cytotoxxic T lymphocyte (CTL) clone. The present protein showed 55% inhibition. The peptides were also tested for their ability to elicit an immune response peptides were also tested for their ability to elicit an immune response of in vivo. However, only H3 (AAW36824) and H7 (AAW36825) were able to do this. His. His and H7 Peptides are tumour-associated antigens, and were used to immunize a transgenic, non-human vertebrate (that has been modified to express at least one HLA antigen), so that the animal produces CTL which (significant in Nucleic acid encoding variable regions of the alpha and beta chains of such TCRs can be amplified from CTLs produced in the above are sociated with a tumour and to treat tumours in humans. Transgenic mice are a more convenient source of CTL than the tumour-infiltrating care a more convenient source of CTL than the tumour-infiltrating care than TCR itself, particularly when expressed as a single-chain molecule rather than as a dimer
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                       Example 1; Page 9; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10; Conservative
and for tumour therapy.
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Best Local Similarity
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RESULT 4

Gaps

Query Match Best Local Similarity 100. Matches 10; Conservative

Best Loca Matches

VMAGVGSPYV 10 VMAGVGSPYV 10

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HER-2/new synthetic peptide epitope 2.

16-NOV-1998 (first entry)

AAW77132;

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Sequences shown in AAW70053 to AAW70075 represent peptides derived from HER-2/neu (cerB-2) antigen. The peptides can bind to a human leukocyte artigen (HLA), HLA-A2.1 and are used to exemplify the method of invention of producing antigen-specific cytotoxic T cells (CTLB) in vitro. The binds class I major histocompatibility complex (MHC) molecules with antigen that antigen presenting cells (APCB) pretreated with pretreatment growth factors, and incubating the APCB with purified CDB cells in the presence of at least 2 incubation growth factors, thereby producing antigen-specific CTLB. A method for specifically killing target cells in a human patient is also provided which comprises obtaining a fluid sample containing CTLB from a patient, contacting the cytotoxic T cells with APCB pretreated with pretreated with pre-treatment growth factors, where the APCB comprise class I MHC molecules. The pretreated APCB are incubated with a carrier to form a composition. The composition can then the administered to the patient. The activated CTLB which are treating cancers, immune disorders, viral infections, AIDS, hepatitis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Production of antigen-specific cytotoxic T cells - by incubating immunogenic peptide(s) from antigén that binds class I major histocompatibility complex molecules with pre-treated antigen presenting
                                                                                                                                                 Cytotoxic T lymphocyte, CTL; major histocompatibility complex, MHC; human leukocyte antigen; HLA; tumour associated antigen; cancer; antigen presenting cell; APC; immunogenic opptide; immune disorder; viral infection; AIDS; hepatitis; bacterial infection; malaria; fungal infection; tuberculosis; melanoma; HER-2/neu; oerB-2.
                                                                                                               HER-2/neu dérived HLA-A2.1 binding peptide 19 (residues 773-782).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dacterial infection, fungal infection, malaria or tuberculosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 51; DB 2; Length 10; llarity 100.0%; Pred. No. 0.013; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 7; Page 77; 104pp; English
AAW70071 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sidney J,
                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US001959
                                                                                                                                                                                                                                                                                                                                                                                                                                                   .97US-0036696P
                                                                      22-OCT-1998. (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIM-) EPIMMUNE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-437445/37.
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tes 10; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-1998;
                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                               WO9833888-A1
                                                                                                                                                                                                                                                                                                                                                                      06-AUG-1998
                                                                                                                                                                                                                                                                       Synthetic
                                    AAW70071;
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Matches
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Sette A,

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specific cytotoxic T lymphocyte response. These peptides are are cysteine depleted mutants of a native disease-specific CTL epitope. The cysteine depleted CTL epitopes elicit a stronger or more specific CTL response than the native epitope. The epitopes can be used in a disease-specific immunogen to protect a mammal against disease in particular melanomas. The peptides may also be used to screen a sample for the presence of an antigen with the same epitope, or with a different cross-reactive epitope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HER2/neu;
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                                                                                                                                                                                                                                                                                                                                                                       Disease specific immunogen - comprises disease specific cytotoxic T
lymphocyte epitope used to elicit melanoma specific CTL response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                peptide epitope AAW77119-W77138 were created for human tumour-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human leukocyte antigen A2 binding peptide; HLA class I A2; CTL; cytotoxic T-cell lymphocyte; tumour associated antigen; CEA; HER2 MAGE2; MAGE3; p53; vaccine; cancer; cytostatic; immunomodulator;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HLA A2 binding CTL epitope peptide from Her2/neu SEQ ID NO:11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 51; DB 2; Length 10; 100.0%; Pred. No. 0.013; cive 0; Mismatches 0; Indels
                                                                                     Tyrosinase, tyrosinase cytotoxic lymphocyte response, cytotoxic T lymphocyte, cysteine-depleted, melanoma.
                                                                                                                                                                                                                                                                                                            Slingluff CL, Hunt DF, Engelhard VH, Kittlesen D;
                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 27; 93pp; English.
                                                                                                                                                                                                                                                                                  (UYVI-) UNIV VIRGINIA PATENT FOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAB99690 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                immunotherapy; immune response
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                                                                                                                                                                                                                                                                                                                                          WPI; 1998-437388/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10 AA;
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                                                                                                                                                            WO9833810-A2
                                                                                                                                                                                                                       9-JAN-1998;
                                                                                                                                                                                                                                                     30-JAN-1997;
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                                                                                                                                                                                          06-AUG-1998
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                                                                                                                                Synthetic.
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Gaps

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AAW77132 standard, peptide; 10 AA.

AAW77132 ID AAW7 XX RESULT 5

(EPIM-) EPIMMUNE INC

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The present invention describes a composition (I) comprising at least one peptide that comprises an isolated, prepared epitope consisting of a sequence selected from 25 short amino acid sequences given in AAB99600 to AAB99704. Also described are: (I) a composition (II) comprising one or more peptides, and further comprising at two epitopes selected from the 25 short amino acid sequences (as above), where each of the one or correspondences of the analyse less than 50 contiguous amino acids that have 100% identity with a native peptide sequence; and (2) a vaccine composition (III) comprising an epitope selected from the 25 short amino acid and a pharmaceutical excipient. (I) has eyrostatic and immunocherapy. The peptide epitope compositions (I) has eyrostatic monitoring an immune response to a tumour associated artigen or when one or more peptides are combined to create a vaccine (III) that stimulates the cellular arm of the immune system. In particular, the vaccine and continue responses against tumours in individual who bear and continue continue and continue continue and continue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard of care for patients being treated for breast, colon, or lung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; HER2/neu; epitope; human leukocyte antigen; HLA; T cell;
immune response; vaccine; tumour; cancer; cytostatic; immunostimulant;
tumour-associated antigen; T lymphocyte; cytotoxic T lymphocyte; CTL.
                                                                                                                                                                                                                                                         Compositions for use in a vaccine for treating, e.g., breast, lung and colon cancer comprises at least one peptide that comprises an isolated epitope of a tumor-associated antigen.
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                                                                                                                                             Keogh
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HER2/neu epitope HLA-A2 supermotif-bearing peptide #16.
                                                                                                                                          Southwood S, Celis E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAG89003 standard; peptide; 10 AA
                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 76; 86pp; English
                                                                                                                                          Sette A, Sidney J,
99US-0170448P
                    05-APR-2000; 2000US-00543608.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-DEC-2000; 2000WO-US033591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-00458299
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VMAGVGSPYV 10
                                                                                             (EPIM-) EPIMMUNE INC
                                                                                                                                                                                                                 WPI; 2001-381489/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10 AA;
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13-DEC-1999;
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                                                                                                                                                                      Cheanut R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAG89003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                          Fikes J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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The present invention describes isolated prepared HER2/neu epitopes (I).

Also described are: (1) a clonal cytotoxic T lymphocyte (CTL) that is
culture in vitro and binds to a complex of an epitope (I), bound to a
human leukocyte antigen (HLA) molecule; (2) a peptide (II) comprising (I)
and a second epitope and the peptide is less than 50 contiguous amino
acids that have 100% identity with a native peptide sequence of HERZ/neu;
(3) a vaccine composition (III) comprising (II) and a pharmaceutical
excipient; (4) an isolated nucleic acid encoding (II). (I) has cytostatic and
continuate activities, and can be used in vaccines (I). (II) and
(III) are useful for inducing cellular immune response for the
prevention and treatment of cancer. (I) and (II) are useful for
monitoring or evaluating an immune response to a tumour-associated
antigen when incubated with a T lymphocyte sample form a patient and
detecting the presence of bound T lymphocyte equitopes that may be present
continuation and that immunosuppressive epitopes that may be present
continuated miniman and a T lymphocyte to (I) or (III). Epitope
hased vaccines mean that immunosuppressive epitopes that may be present
continuated antigens may be avoided. Selected epitopes that may be present
continuated that same patholem. Epitope-based anti-tumour
continuations agents or whole protein antigen is eliminated. The vaccine
provides the ability to direct and focus an immune response to multiple
selected antigens from the same pathogen. Epitope-based anti-tumour
vaccines provides the opportunity to combine epitopes derived from
multiple tumour-associated molecules addressing the problem of tumour
reconstructions agents or whole protein eliminated of tumour
reconstructions agents or high eliminated of tumour elected antigens from the likelikely the likelikely and reducines provides the opportunity to combine epitopes derived from
multiple tumour-associated molecules and focus en immune epitopes derived from elected entides the all the provides the all the likelikely 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tumour variability and reducing the likelihood of tumour escape due to
antigen loss. AAG88266 to AAG89121 represent amino acid sequences used in
the exemplification of the present invention
                                                                                                                                                         An isolated prepared HER2/neu epitope useful in a vaccine for inducing cellular immune responses for the prevention and treatment of cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; HER2/neu; epitope; human leukocyte antigen; HLA; T cell;
immune response; vaccine; tumour; cancer; cytostatic; immunostimulant;
tumour-associated antigen; T lymphocyte; cytotoxic T lymphocyte; CTL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                          Celis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.013; tive 0; Mismatches 0; Indels
                                          Chesnut R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HER2/neu A2 supermotif crossbinding peptide #16.
                                          Southwood S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAG88772 standard; peptide; 10 AA.
                                                                                                                                                                                                                                    Claim 1; Page 189; 199pp; English
                                        Sette A, Sidney J,
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hes 10; Conservative
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                                                                                                              WPI; 2001-374995/39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAG88772;
                                          Fikes J,
Keogh E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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Chesnut R,

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The present invention describes isolated prepared HERZ/neu epitopes (I).

Also described are: (1) a clonal cytotoxic T lymphocyte (CTL) that is culture in vitro and binds to a complex of an epitope (I), bound to a human leukocyte antigen (HLA) molecule; (2) a peptide (II) comprising (I) and a second epitope and the peptide is less than 50 contiguous amino acids that have 100% identity with a native peptide sequence of HERZ/neu; (3) a vaccine composition (III) comprising (II) and a pharmaceutical excipient; (4) an isolated nucleic acid encoding a peptide comprising (I); and (5) an isolated nucleic acid encoding (II). (I) has cytostatic and immostimulant activities, and can be used in vaccines. (I), (II) and (III) are useful for the prevention and treatment of cancer. (I) and (II) are useful for monitoring or evaluating an immune response to a tumour-associated antigen when incubated with a T lymphocyte sample form a patient and antigen when incubated with a T lymphocyte to (I) or (II). Epitope based vaccines mean that immunosphressive epitopes that may be present in whole antigens may be avoided. Selected epitopes may be combined to in whole antigens may be avoided. Selected epitopes and to maked to make the combined to the company of the present of the may be avoided. Selected epitopes may be combined to the company of the present of the may be avoided. Selected epitopes may be combined to the company of the present of the may be avoided. Selected epitopes and the company of the present of the may be avoided. Selected epitopes and the company of the present of the may be avoided. Selected epitopes and the company of the present of the may be avoided. Selected epitopes and the combined to the may be avoided. Selected epitopes and the combined to the company of the may be avoided. Selected epitopes and the company of the present of the company of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tumour variability and reducing the likelihood of tumour escape due to antigen loss. AAG88266 to AAG89121 represent amino acid sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antiviral; anti-HIV; cytostatic; epitope; HLA A2.1;
human leukocyte antigen; immunotherapy; cancer; viral infection; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       enhance immunogenicity. The possible pathological side effects caused by infectious agents or whole protein antigen is eliminated. The vaccine provides the ablity to direct and focus an immune response to multiple selected antigens from the same pathogen. Epitope-based anti-tumour vaccines provides the opportunity to combine epitopes derived from multiple tumour-associated molecules addressing the problem of tumour-
                                                                                                                                                                                                                                                    An isolated prepared HER2/neu epitope useful in a vaccine for inducing cellular immune responses for the prevention and treatment of cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumour antigen epitope HER-2/neu 773 presented by HLA A2.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.013;
                                                                                                                 Southwood S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                         Example 2; Page 179; 199pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABB76755 standard; peptide; 10 AA.
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                                                                                                              Sidney J,
  99US-00458299
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Best Local Similarity 100.
Matches 10; Conservative
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                                                    (EPIM-) EPIMMUNE INC
                                                                                                                                                                                             WPI; 2001-374995/39
                                                                                                                 Sette A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10 AA;
10-DEC-1999;
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                                                                                                           Fikes J,
Keogh B;
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Treating a subject with cancer comprises combining the CD+8 cells, which are stimulated with non-naturally occurring antigen-presenting cell line, with adherent blood monocytes and inoculating the subject with CD8+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a method of treating a subject with cancer. The method involves combining the CD+8 cells, which are stimulated with non naturally occurring antigen-presenting cell (nnAPC) line, with adherent blood monocytes and inoculating the subject with CD8+ suspension. The
                                                                                                                            Identifying subdominant or cryptic epitopes, useful in immunotherapy of cancer and viral infection, comprises testing modified, non-immunogenic peptides for induction of cytotoxic T cells.
                                                                                                                                                                                                                        The present invention relates to subdominant/cryptic epitopes that are presented by HLA (human leukocyte antigen) Class I molecule A2.1. The epitopes or chimeric polypeptides containing them and nucleic acid encoding them are useful for preventative or curative immunotherapy of cancer and viral infections, particularly where used as vaccines. The present peptide was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         duman; cancer; breast cancer; ovarian cancer; melanoma; cell therapy;
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
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                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 51; DB 5; Length 10; 100.0%; Pred. No. 0.013;
                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human HLA-A2.1 restricted HER-2/neu peptide epitope #6.
                                                                Gross DA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jackson MR,
                              (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          epitope; human leucocyte antigen; HLA-A2.1
                                                                Tourdot S, . Scardino A,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAE26800 standard, peptide; 10 AA.
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                                                                                                                                                                                            Example 1; Page 12; 62pp; French.
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21-JUL-2000; 2000FR-00009591
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                                                                                                                                                                                                                                                                                                                                                                                                            10; Conservative
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                                                                                             WPI; 2002-189846/25
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                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                Kosmatopoulos K,
                                                                                                                                                                                                                                                                                                                                           Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
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Heiskala M;
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                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                              Local
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AAE26800
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The invention relates to a novel method for treating viral infection in a subject. The method comprises preparing an antigen presentation cell lineage (nnAPC), collecting CD8+ cells from the subject, stimulating CD8+ cells using the nnAPC, culturing CD8+ cells in the presence of interleukin-2 (IL-2) and/or IL-7, mixing peripheral blood monocytes from the subject, subjecting the components to gamma irradiation, combining the CD8+ suspended solid to the subject. The method of the invention demonstrates virucide and cytostatic activities and may be useful for treating a viral infection or tumor in a subject via cell therapy. The current sequence is that of a human HER-2/neu cytosoxic T-1ymphocyce epitope peptide of the invention which was incorporated into a brosophila
method is useful for treating cancer e.g. ovarian cancer, breast cancer and melanoma etc. It is also useful in cell therapy. The present sequence is human leukocyte antigen A2 (HLA-A2).1 restricted peptide epitope used to treat breast and ovarian cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Treating a subject with cancer comprises combining the CD+8 cells, which are stimulated with non-naturally occurring antigen-presenting cell line, with adherent blood monocytes and inoculating the subject with CD8+
                                                                                                                                                                                                                                                                                                                                                                                                                                                        viral infection; virucide; cytostatic; tumor; neoplasm; cell therapy;
                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Richards JM;
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                                                                                                                                                                                                                                                                                                                                                                                                                         Human HER-2/neu 773-782 cytotoxic T-lymphocyte epitope peptide.
                                                                                                                  ch 100.0%; Score 51; DB 5; Length 10; Similarity 100.0%; Pred. No. 0.013; 10; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; SEQ ID NO 16; 65pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Leturco DJ, Moriarty AM, Jackson MR,
                                                                                                                                                                                                                                                                                                                     AEA36306 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ORTH ) ORTHO-MCNEIL PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-NOV-2003; 2003JP-00377653.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-FEB-2001; 2001US-0270252P.
                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antigen; HER-2/neu.
                                                                                                                          Query Match
Best Local Similarity
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                                                                                         Sequence 10 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       suspension
                                                                                                                                                                                                                                                                                                                                                        AEA36306;
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The invention relates to a polypeptide capable of specifically activating cytotoxic T lymphocytes (CTLs) in vivo which can then specifically target cytotoxic T lymphocytes (CTLs) in vivo which can then specifically target or malignant cells, or having substantial homology with a CTL spltope, or its sequential subsets. Also included are a population of specific cytotoxic T cells capable of lysing tumour cells displaying a specific cytotoxic T cells that will target a specific peptide, specific generating an immunospenically effective amount of CTL cells that will target a specific population of cells, specifically killing target cells in an individual uning specific, activated CTLs, provoking an immunospenically effecting specific CTLs response to a tumour-associated antigen, identifying specific CTLs response to a tumour-associated antight in a cantibody molecule that immunoreacts with the polypeptide and a hybridoma capable of secreting anti-p53 antibodies in an individual, an antibody molecule that immunoreacts with the polypeptide and a hybridoma capable of secreting at are useful for cristope specific T cells in an individual using specific. T esponse to a tumour-associated antigen in mammal and the reaction occurs of vitro. The CTL spitope peptide is useful for activating CTLs in vivo in vitro. The CTL spitope peptide is useful for activating CTLs in vivo with specificity for particular antigenic peptides, and these activated CTLs are useful in the diagnosis and treatment of variaty of disease conditions such as cancer, tumours, neoplasia, viral and retroviral infections, and autoimmune response. The tumour associated antigen Her-Alling such an expense of the thought and the tumour associated from the tumour associated antigen Her-Alling such and autoimmune response. The tumours is activated antigen Her-Alling such as a second and the second antigen her-Alling such and autoimmune response. The tumour associated and antigen Her-Allinope of the invention derived from the tumour associated and antigen Her-All
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for activating cytotoxic T lymphocytes in vivo liagnosis and treatment of variety of disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTL; cytotoxic C lymphocyte; epitope; p53; cytostatic; anti-tumour; virucide; immunosuppressive; vaccine; human; immune response; tumour-associated antigen; cancer; tumour; neoplasm; viral infection; retroviral infection; autoimmune response; Her-2; Neu.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel polypeptide useful for activating cytotoxic which are useful in the diagnosis and treatment o conditions such as cancer, tumors, and neoplasia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human Her-2/Neu-derived CTL epitope HER-7.
                                                                                                                                                                                                                                                          ABU63012 standard; peptide; 10 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
MPI; 2003-512514/48.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003064916-A1.
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ABU663
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100.0%; Score 51; DB 6; Length 10; 100.0%; Pred. No. 0.013; ive 0; Mismatches 0; Indels
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ses 10; Conserva
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Matches
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Gaps

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100.0%; Score 51; DB 5; Length 10; 100.0%; Pred. No. 0.013; tive 0; Mismatches 0; Indels

Sequence 10 AA;

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02-DEC-1994;
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(SIDN/)
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ARB97756
ID DARB97756
AC ADB97756
DT 12-FE
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cytostatic; anti-inflammatory; hepatotropic; virucide; anti-HIV; nephrotropic; neuroprotective; antiarthritic; antirheumatic; nemunosuppressive; dermatological; muscular; nephrotropic; thyromimetic; haemostatic; antithyroid; antianaemic; ambolic; hypertensive; immunogenic peptide composition; immune response; prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma; cervical carcinoma; lymphoma; cytomegalovitus; CWV; condlylloma acuminatum; autoimmune associated disorder; multiple sclerosis; rheumatoid arthritis; Sjogren syndrome; scleroderma; polymyositis; dermatomyositis; ankylosing spondylitis; mysathenia gravis; MG; bullous pemphigoid; pemphigus; glomerulonephritis; Goodpasture's syndrome; aneamia; autoimmune haemolytic anaemia; Hashimoto's disease; pernicious anaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  idiopathic thrombocytopenic purpura; Grave's disease; Addison's disease; human leukocyte anitgen A2.1; HLA A2.1; immunogenic HLA-A2.1 binding peptide.
                                                                                                                                                                                                                                                                                                    Immunogenic HLA-A2.1 binding peptide #238,
ADE97756 standard; peptide; 10 AA
                                                                                                                                                                                                       12-FEB-2004 (first entry)
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US2003185822-AI. - Lamofta URci (U) 1021 93US-00073205. 93US-00159184. 94US-00349177. 03-APR-2002; 2002US-00116557. 93US-00027146

Sidney J; Sette A,

WPI; 2004-041186/04

Immunogenic peptide composition for preventing, treating or diagnosing pathological states, e.g. prostate cancer, hepatitis B and C, Acquired Immunodeficiency Syndrome, and renal carcinoma, includes conserved residues at specified postitions.

Example 11; Page 25; 38pp; English

The invention describes an immunogenic peptide composition comprising 9 residues including a first conserved residue at a second position from Netarinus, and a second conserved residue at C-terminal position. The inventive peptide composition is used to clicit an immune response against a desired antigen for preventing, treating or diagnosing pathological states, e.g. prostate cancer, hepatitis B, hepatitis C, AIDS, renal carcinoma, lymphoma, cytomegalovirus (CMV), and condlylloma acuminatum. It is also used to treat autoimmune associated disorders, e.g. multiple sclerosis, rheumatoid arthritis, systemic lubus erythematosus, juvenile rheumatoid arthritis, ankylosing spondylitis, myasthemia gravis (MG), bullous pemphigoid, pemphigus, glomerulonephritis, Goodpasture's syndrome, autoimmune hemolytic anemia,

purpura, Grave's disease, and Addison's disease. The invention defines positions within a motif enabling the selection of the peptides, which will bind efficiently to human leukocyte anitgen (HLA) A2.1. This is the amino acid sequence of an immunogenic HLA-A2.1 binding peptide. Hashimoto's disease, pernicious anaemia, idiopathic thrombocytopenic 88888888

Sequence 10 AA;

Gaps ô 0; Indels 100.0%; Score 51; DB 8; 100.0%; Pred. No. 0.013; Mismatches ö Query Match Beet Local Similarity luv.v. -hes 10; Conservative

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10

VMAGVGSPYV

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RESULT 14 ADM12647

ADM12647 standard; peptide; 10 AA

ADM12647;

20-MAY-2004

(first entry)

MHC class I epitope of human Her-2/neu, 16-6-9.

antigen presentation enhancing hybrid polypeptide; mammalian Ii-Key; MHC class II; antibacterial; virucide; fungicide; antirheumatic; antiarthritic; neuroprotective; dermatological; immunosuppressive; antinflammatory; antidiabetic; antithyroid; immune; rhenmatory; antidiabetic; antithyroid; immune; rhenmatory atthritis; multiple sclerosis; lupus erythematosus; diabetes mellitus; myasthenia gravis; autoimmune thyroiditis; scleroderma; dermatomyositis; pemphigus.

Homo sapiens

JS2003235594-A1

25-DEC-2003.

17-SEP-2002; 2002US-00245871.

14-SEP-1999; 99US-00396813. 17-JUL-2002; 2002US-00197000.

(ANTI-) ANTIGEN EXPRESS INC.

Humphreys R,

VPI; 2004-070554/07.

Novel Ii-Key/antigen presentation enhancing hybrid polypeptide, useful for treating infections, rheumatoid arthritis, multiple sclerosis, lupus erythematosus and diabetes mellitus.

Example 16; Page 55; 87pp; English.

The invention relates to a novel antigen presentation enhancing hybrid polypeptide. The novel polypeptide has an N-terminal element consisting of 4-16 residuates of a mammalian II-Key peptide and its non-N-terminal element consisting the non-N-terminal deletion modifications, a chemical structure covalently linking the N-terminal element to an MHC class II-presented epitope of a C-terminal element comprises an antigenic peptide binding site of an MHC class II molecule. The C-terminal element comprises an antigenic peptide binding site of an MHC class II molecule. The antigen presentation enhancing hybrid polypeptide has the following activities: antibacterial, virucide, fungloide, antihenmatic, antiatathritic, neuroprotective, dermatological, immunosuppressive, antiathritic, neuroprotective, dermatological, immunosuppressive, antiatrial and for in an individual and for treating infections (such as bacteria, virus, parasite and fungus), rheumatoid arthritis, multiple sclerosis, lupus erythematosus, diabetes mellitus, myasthenia gravis, autoimmune

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                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antibacterial, Virucide, Fungicide, Antiparasitic, Antiarthritic, Antirheumatic, Neuroprotective, Antiinflammatory; Dermatological; Immunosuppressive, Antidabetic, Antiinflammatory; Dermatological; Immunosuppressive, Antidabetic, Antiparoid, Antiasthmatic, Antiallergic, Cytostatic, Antipsorialic; Gene Therapy Vaccine; MHC Class II; Ii-key motif; immune response; anthrax; EBOLA, HIV; influenza; vaccinia virus; infection; bacterium; virus; parasite; fungus; rickettsia, rheumatoid arthritis; multiple sclesosis; lupus erythematosus; diabetes mellitus; myasthenia gravis; autoimmune thyroiditis; scleroderma; dermatomyositis; penphigus; asthma; allergic rhinitis; topical dermatitis; colltis; cancer; psoriasis;
thyroiditis, scleroderma, dermatomyositis and pemphigus. This sequence represents a mammalian Ii key related peptide epitope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New non-naturally occurring protein or polypeptide modified by recombinant DNA techniques, useful for treating multiple sclerosis, diabetes mellitus, myasthenia gravis, scleroderma, allergic rhinitis,
                                                                                                                               Gaps
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                                                                                         Length 10;
                                                                                       Ouery Match 100.0%; Score 51; DB 8; Length 10 Best Local Similarity 100.0%; Pred. No. 0.013; Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        Human Her-2/neu MHC class II-presented epitope #67.
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                                                                                                                                                                                                                                                                                                       ADO38880 standard; peptide; 10 AA
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                                                       Sequence 10 AA;
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                                                                                                                                                                                                                                                                                                                                             AD038880;
                                                                                                                                                                                                                                                                   RESULT 15
ADO38880
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presented epitope of interest. Suppressing an immune response directed toward an MHC Class II-presented epitope of interest comprises: providing a nucleic acid sequence encoding the MHC Class II-presented epitope of interest, the nucleic acid sequence encoding an Ii-Key motif located 4-11 amino acids upstream from the N-terminal residue of the MHC Class II-presented epitope of interest; and modifying the II-Key motif to decrease

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its conformance to the archetypal Ii-Key regulatory motif. Enhancing an immune response directed toward an MHC Class II-presented epitope of interest comprises providing a nucleic acid sequence encoding the MHC class II-presented epitope of interest, the nucleic acid sequence lacking an Ii-Key motif located 4-11 amino acids upstream from the N-terminal residue of the MHC class II-presented epitope of interest; and modifying the nucleic acid sequence to introduce an Ii-Key motif appropriately spaced from the MHC class II-presented epitope. The protein or copyeptide of interest corresponds to a protein or preferably vaccinia virus. The non-naturally occurring protein or preferably vaccinia virus. The non-naturally occurring protein or treating infectious diseases caused or associated with infections of bacterium, virus, parasite, fungus, ricketteia or other infections agents It is also useful for treating rheumatoid arthritis, multiple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                     sčlerosis, lupus erythematosus, diabetes mellitus, myasthenia gravis, autoimmune thyroiditis, scleroderma, dermatomyositis, pemphigus, asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  allergic rhinitis, topical dermatitis, colitis, cancer, psoriasis or adenomas. The present sequence represents the amino acid sequence of MHC class II-presented epitope used in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 51; DB 8; Length 10; 100.0%; Pred. No. 0.013; ive 0; Mismatches 0; Indel8.
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April 11, 2006, 19:24:25 ; Search time 24 Seconds (without alignments) 12.997 Million cell updates/sec
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1: /SIDS5/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*

2: /SIDS5/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*

3: /SIDS5/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*

4: /SIDS5/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*

5: /SIDS5/ptodata/1/pubpaa/USO9_NEW_PUB.pep:*

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Copyright (c) 1993 - 2006 Biocceleration Ltd.
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Perfect score:
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		Description	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Seguence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence
SUMMARIES	;	QI	US-11-033-039-620	US-10-510-101-135	US-11-045-024-2492	US-11-045-024-7995	US-11-045-024-2498	US-11-045-024-4891	US-11-045-024-6819	US-10-966-483-5	US-10-511-273-7	US-10-517-784-42	US-11-125-837-12	US-11-045-024-2949	US-11-045-024-2950	US-11-045-024-9135	US-11-045-024-9136	US-11-045-024-9240	US-11-045-024-9252	US-11-045-024-11312	US-11-045-024-11313	US-11-045-024-11376	US-11-045-024-11383	US-11-021-441-67	US-11-045-024-1234	US-11-045-024-1235	US-11-045-024-9139
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	Query	Match	100.0	80.4	56.9	56.9	56.9	56.9	56.9	51.0	.51.0	47.1	47.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1	45.1
		Score	51	41	29	59	29	29	29	56	26	24	24	23	23	23	23	23	23	23	23	23	23	23	23	23	23
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9140, 92420, 92555, 111318, 92142, 92244, 1113106, 111378, 111378, 111378, 111378, 111378,	sequence 743, App Sequence 6, Appli
11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024- 11.045-024-	7 US-11-032-773-743 7 US-11-197-315-6
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APPLICANT: Stance, John
APPLICANT: Stance, John
APPLICANT: Livingston, Brian
APPLICANT: Livingston, Brian
APPLICANT: Livingston, Brian
APPLICANT: Celesut, Robert
APPLICANT: Celis, Esteban
APPLICANT: Celis, Esteban
APPLICANT: Celis, Esteban
APPLICANT: Celis, Esteban
APPLICANT: Rubo, Ralph
APPLICANT: Epimmune Inc.
APPLICANT: WUMPER: US/11/045,024
CURRENT APPLICATION WUMBER: US 09/412,863
PRIOR PILING DATE: 1999-10-05
PRIOR PLING DATE: 1999-0-0-05
PRIOR PLING DATE: 1993-03-05
PRIOR APPLICATION NUMBER: US 08/027,146
PRIOR APPLICATION NUMBER: US 08/073,205
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Virus-1 Using Peptide and Nucleic Acid Compositions
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Pred. No. 1.4e+05;
1; Mismatches 1;
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PRIOR FILING DATE: 1993-06-04
PRIOR FILING DATE: 1993-06-06
PRIOR FILING DATE: 1993-06-06
PRIOR FILING DATE: 1993-08-06
PRIOR FILING DATE: 1993-11-29
PRIOR FILING DATE: 1993-11-29
PRIOR FILING DATE: 1993-11-29
PRIOR FILING DATE: 1993-11-29
PRIOR PILING DATE: 1994-12-01
PRIOR APPLICATION NUMBER: US 08/205,713
PRIOR APPLICATION NUMBER: US 08/205,713
PRIOR APPLICATION NUMBER: US 08/347,610
PRIOR PILING DATE: 1994-12-01
NUMBER OF SEQ ID NOS: 14528
SOFTWARE: FREUSEG FOR WINDOWS Version 4.0
SEQ ID NO 7995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GRGANISM: HUMAN IMMUNODEFICIENCY VIRUS US-11-045-024-7995
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Publication No. US20050271676A1
                                                                                                                      Sequence 7995, Application US/11045024
Publication No. US20050271676A1
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Livingston, Brian
Chesnut, Robert
Baker, Denise Marie
Celis, Esteban
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71.4%;
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Grey, Howard M.
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Best Local Similarity 71.4
Matches 5; Conservative
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CURRENT APPLICATION WUMBER: US/11/045,024

PRICE REFERENCE: 2005-01-20
                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Synthetic peptide derived from Homo sapiens Her2/neu
US-10-510-101-135
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Pred. No. 1.4e+05;
0; Mismatches 1; Indels
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71.4%; Pred. No. 1.4e+05;
:ive 1; Mismatches I.
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PRIOR APPLICATION NUMBER: US 09/412,863
PRIOR FILING DATE: 1999-10-05
PRIOR PILING DATE: 1999-10-05
PRIOR PILING DATE: 1993-03-05
PRIOR FILING DATE: 1993-03-05
PRIOR FILING DATE: 1993-06-04
PRIOR FILING DATE: 1993-06-06
PRIOR FILING DATE: 1993-06-06
PRIOR FILING DATE: 1993-08-06
PRIOR FILING DATE: 1993-11-29
PRIOR FILING DATE: 1994-03-04
PRIOR PILING DATE: 1994-03-04
PRIOR PILING DATE: 1994-03-04
PRIOR FILING DATE: 1994-12-01
NUMBER OF SEQ ID NOS: 14528
SOFTWARE: PREASEQ for Windows Version 4.0
SEQ ID NO 2492
PRIOR APPLICATION NUMBER: US 60/413,471
PRIOR FILING DATE: 2002-09-26
PRIOR APPLICATION NUMBER: US 10/116,118
PRIOR FILING DATE: 2002-04-05
NUMBER OF SEQ ID NOS: 196
SOFTWARE: Patentin version 3.2
SEQ ID NO 135
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Publication No. US20050271676A1
GENERAL INFORMATION:
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Best Local Similarity 88.9%;
Matches 8; Conservative
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Grey, Howard M.
Epimmune Inc.
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Best Local Similarity 71.4
Matches 5; Conservative
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4 GVGSPYV 10

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Score 29; DB 7; Length 10;
Pred. No. 10;
1; Mismatches 1; Indels
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Pred. No. 10;
1; Mismatches 1; Indels
SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4891
                                                            ; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-4891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
                                                                                                                                                                                                                                                                                                                                                                        Sequence 6819, Application US/11045024 Publication No. US20050271676A1 GENERAL INFORMATION:
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; Sequence 5, Application US/10966483
; Publication No. US20050281783A1
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Southwood, Scott
Livingston, Brian
Chesnut, Robert
Baker, Denise Marie
Celis, Esteban
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ilarity 71.4%;
Conservative
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Best Local Similarity 71.4
These 5. Conservative
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Grey, Howard M.
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Best Local Similarity
Matches 5; Conserv
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CURRENT APPLICATION NUMBER: 02/11/045,024
CURRENT FILING DATE: 2005-01-28
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      FILE KEFERENCE: 200.004000;
CURRENT PEDLICATION NUMBER: US/11/045,024
CURRENT FILING DATE: 2005-01-28
PRIOR FILING DATE: 1999-10-05
PRIOR FILING DATE: 1999-10-05
PRIOR PLING DATE: 1999-00-05
PRIOR PLING DATE: 1993-06-04
PRIOR PLING DATE: 1993-06-04
PRIOR PELING DATE: 1993-06-04
PRIOR PLING DATE: 1993-06-04
PRIOR PLING DATE: 1993-06-04
PRIOR PLING DATE: 1993-06-06
PRIOR PLING DATE: 1993-06-06
PRIOR PLING DATE: 1993-06-06
PRIOR PLING DATE: 1993-06-06
PRIOR PLING DATE: 1993-11-29
PRIOR PLING DATE: 1994-11-29
PRIOR PLING DATE: 1994-11-29
PRIOR PLING DATE: 1994-12-01
NUMBER OF SEQ ID NOS: 14528
SEQ ID NOS: 14528
SEQ ID NOS: 14528
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PRIOR PILLANG DATE: 1993-10-05
PRIOR PILLING DATE: 1993-10-05
PRIOR PELICATION NUMBER: US 08/027,146
PRIOR APPLICATION NUMBER: US 08/073,205
PRIOR PILLING DATE: 1993-06-04
PRIOR PILLING DATE: 1993-06-04
PRIOR PILLING DATE: 1993-06-06
PRIOR PILLING DATE: 1993-11-29
PRIOR PILLING DATE: 1994-03-04
PRIOR PILLING DATE: 1994-03-04
PRIOR PILLING DATE: 1994-12-01
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Celis, Esteban
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Southwood, Scott
Livingston, Brian
Chesnut, Robert
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Grey, Howard M.
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US-10-517-784-42

US-10-517-784-42

Sequence 42, Application US/10517784

Publication No US20060003315A1

GENERAL INFORMATION:

APPLICANT: GROSS, Giddeon

TITLE OF INVENTION: MEMBRANE-ANCHORED BETA-2 MICROGLOBULIN COVALENTLY LINKED TO MHC

TITLE OF INVENTION: MEMBRANE-BETTOPES

FILE REPERENCE: GAVISH-004 US

CURRENT FILING DATE: 2004-12-13

PRIOR APPLICATION NUMBER: US 60/388,273

PRIOR APPLICATION NUMBER: PCT/IL03/00501

PRIOR APPLICATION NUMBER: PCT/IL03/00501

PRIOR SPELING DATE: 2003-06-12

NUMBER OF SEQ ID NOS: 64

SOFTWARE: Patentin version 3.1

TENNING DATE: 2004-06-12

SEQ ID NO 42
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Pred. No. 1.4e+05;
1; Mismatches 3; Indels
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APPLICANT: Chang, Chung Nan
APPLICANY: Chen, Pei-Jiun
APPLICANY: Huang, Chiu-Chen
TITLE OF INVENTION: ANTIBODIES
FILE REFERENCE: 13062-011001
CURRENT PILING DATE: 2005-05-10
PRIOR PILING DATE: 2004-05-10
PRIOR PILING DATE: 2004-05-10
PRIOR PILING DATE: 2004-05-10
NUMBER OF SEQ ID NOS: 100
SOFTWARE: FASELSEQ for Windows Version 4.0
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ORGANISM: Artificial Sequence
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50.0%;
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COTHER INFORMATION: Synthetic
US-10-517-784-42
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Best Local Similarity 50.0
Matches 4; Conservative
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LENGTH: 10
TYPE: PRT
ORGANISM: Mus musculus
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Best Local Similarity
Matches 4; Conserv
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51.0%; Score 26; DB 6; Length 9;
Best Local Similarity 83.3%; Pred. No. 1.4e+05;
Matches 5; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0, Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 9;
                            APPLICANT: Kinch, Michael S.
APPLICANT: Kinch, Michael S.
APPLICANT: Stanckheimer, Bizabeth
APPLICANT: Bruckheimer, Bizabeth
APPLICANT: Bubensky, Jr. Thomas W.
APPLICANT: Cook, David N.
TITLE OF INVENTION: LISTERIA-BASED EphA2 VACCINES
FILE REFERENCE: 10271-146
CURRENT APPLICATION NUMBER: US 60/511,919
PRIOR APPLICATION NUMBER: US 60/511,719
PRIOR APPLICATION NUMBER: US 60/511,719
PRIOR APPLICATION NUMBER: US 60/511,719
PRIOR PILING DATE: 2003-10-15
PRIOR PILING DATE: 2003-12-24
PRIOR PILING DATE: 2004-10-01
PRIOR PILING DATE: 2004-00-05
PRIOR PILING DATE: 2004-10-01
PRIOR PILING DATE: 2004-10-01
PRIOR PILING DATE: 2004-10-01
PRIOR PILING DATE: 2004-10-07
NUMBER OF SEQ ID NOS: 72
SOFTWARE: Patentin Version 3.2
LENGTH: 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 7. Application US/10511273

Sequence 7. Application US/10511273

Publication No. US20060034856A1

GENERAL INFORMATION:

APPLICANT: KOSMATOPOULOS, KOSTAS

APPLICANT: ALVES, PEDRO

TITLE OF INVENTION: EPHAZ ANTIGEN T EPITOPES

FILE REPRENCE: 26044910SONPCT;

CURRENT APPLICATION NUMBER: US/10/511,273

CURRENT APPLICATION NUMBER: PCT/FR03/01280

PRIOR FILING DATE: 2003-04-23

PRIOR APPLICATION NUMBER: F 02/05048

PRIOR FILING DATE: 2002-04-23

PRIOR FILING DATE: 2002-04-23

NUMBER OF SEQ ID NOS: 10

SOFTWARE: Patentin version 3.3

SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Mismatches
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FRATURE:
, OTHER INFORMATION: Synthetic Peptide
US-10-511-273-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   51.0%;
83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence
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Best Local Similarity 83...
Best Si Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
CORGANISM: Homo sapiens
US-10-966-483-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 VLAGVG 6
                  GENERAL INFORMATION:
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US-10-511-273-7
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Gaps

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PILING DATE: 1993-08-06
APPLICATION NUMBER: US 08/159,184
APPLICATION NUMBER: US 08/103,396
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Southwood, Scott
Livingston, Brian
Chesmut, Robert
Baker, Denise Marie
Celis, Esteban
Kubo, Ralph
Grey, Howard M.
Epimmune Inc.
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80.0%;
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Best Local Similarity 80.0%;
Matches 4; Conservative
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Best Local Similarity
                                                                                                          APPLICANT: Cneenur, Kobert
APPLICANT: Calis, Esteban
APPLICANT: Expirmune Inc.
ITILE OF INVENTION: Inducing Callular Responses to Human Immunodeficiency
ITILE OF INVENTION: Virua-1 Using Peptide and Nucleic Acid Compositions
FILE REFERENCE; 2060.0040007
CURRENT PAPLICATION NUMBER: US 09/412,863
PRIOR PLILING DATE: 1999-10-05
PRIOR PLILING DATE: 1999-10-05
PRIOR PPLICATION NUMBER: US 08/027,146
PRIOR PLILING DATE: 1993-60-04
PRIOR PLILING DATE: 1993-60-06
PRIOR PLILING DATE: 1993-60-06
PRIOR PLILING DATE: 1993-11-29
PRIOR PLILING DATE: 1994-11-20
PRIOR PLILING DATE: 1994-12-01
NUMBER: US 08/159,184
PRIOR PLILING DATE: 1994-12-01
NUMBER OF SEC ID NOS: 14528
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 2949
LEVEL OF TABLE O
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APPLICANT: Southwood, Scott
APPLICANT: Southwood, Scott
APPLICANT: Livingston, Brian
APPLICANT: Chesnut, Robert
APPLICANT: Baker, Denise Marie
APPLICANT: Celis, Esteban
APPLICANT: Celis, Esteban
APPLICANT: Grey, Howard M.
APPLICANT: Epimmune Inc.
TITLE OF INVENTION: Inducing Cellular Responses to Human Immunodeficiency
TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions
FILE REPERENCE: 2006.0040007
CURRENT APPLICATION NUMBER: US/11/045,024
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80.0%; Pred. No. 1.4e+05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-2949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 09/412,863
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: US 08/027,146
PRIOR FILING DATE: 1993-03-05
PRIOR APPLICATION NUMBER: US 08/073,205
PRIOR FILING DATE: 1993-06-04
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                      Southwood, Scott
Livingston, Brian
Chesnut, Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 80.0
Matches 4; Conservative
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APPLICANT: Kubo, Ralph
APPLICANT: Grey, Howard M.
APPLICANT: Bipimmune Inc.
TITLE OF INVENTION: Ulrus-1 Using Peptide and Nucleic Acid Compositions
FILE REPERRENCE: 2006-004-007
CURRENT APPLICATION NUMBER: US/91/045,024
CURRENT APPLICATION NUMBER: US 09/412,863
PRIOR FILING DATE: 1999-10-05
PRIOR FILING DATE: 1999-10-05
PRIOR FILING DATE: 1999-06-04
PRIOR FILING DATE: 1993-06-04
PRIOR FILING DATE: 1993-06-04
PRIOR FILING DATE: 1993-11-29
PRIOR FILING DATE: 1994-03-04
PRIOR FILING DATE: 1904-03-04
PRIOR FILING DATE: 1904-03
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Pred. No. 1.4e+05;
0; Mismatches 1.
PRIOR FILING DATE: 1993-11-29
PRIOR PILING DATE: 1993-11-29
PRIOR PILING DATE: 1993-11-29
PRIOR PILING DATE: 1993-11-29
PRIOR FLING DATE: 1994-03-04
PRIOR PLING DATE: 1994-03-04
PRIOR PLING DATE: 1994-03-04
PRIOR PILING DATE: 1994-12-01
NUMBER: OF SEQ ID NOS: 14528
SEQ ID NO 2950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 8
TYPE: PRT
COGANISM: HUMAN IMMUNODEFICIENCY VIRUS
US-11-045-024-2950
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; Sequence 9135, Application US/11045024
; Publication No. US20050271676A1
; GENERAL INFORMATION:
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CURRENT APPLICATION NUMBER: US/11/045,024
CURRENT FILING DATE: 2005-01-28
CURRENT FILING DATE: 2005-01-28
CORRECT FILING DATE: 2005-01-28
  Gaps
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0
1; Indels
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PRIOR APPLICATION NUMBER: US 08/027,146
PRIOR PILING DATE: 1999-03-05
PRIOR PILING DATE: 1993-03-05
PRIOR PILING DATE: 1993-06-04
PRIOR FILING DATE: 1993-06-04
PRIOR FILING DATE: 1993-06-06
PRIOR FILING DATE: 1993-10-06
PRIOR PILING DATE: 1993-11-29
PRIOR APPLICATION NUMBER: US 08/159,139
PRIOR FILING DATE: 1993-11-29
PRIOR FILING DATE: 1993-11-29
PRIOR FILING DATE: 1994-12-01
PRIOR APPLICATION NUMBER: US 08/25,713
PRIOR APPLICATION NUMBER: US 08/25,713
PRIOR PILING DATE: 1994-12-01
NUMBER OF SEQ ID NOS: 14528
SOFTWARE: FeatSEQ for Windows Version 4.0
SEQ ID NO 9136
LENGTH: 8
TYPE: BRT
ORGANISM: HUMAN IMMUNOBEFICIENCY VIRUS
US-11-045-024-9136
  0; Mismatches
                                                                                                                                                          RESULT 15
US-11-045-024-9136
Sequence 9136, Application US/11045024
Publication No. US20050271676A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                      Southwood, Scott
Livingston, Brian
Chesnut, Robert
Baker, Denise Marie
Celis, Esteban
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Grey, Howard M.
Epimmune Inc.
  4; Conservative
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Best Local Similarity 80.0
Matches 4; Conservative
                                             4 GVGSP 8
                                                                                      2 GVGGP 6
  Matches
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Search completed: April 11, 2006, 19:27:28 Job time: 25 secs

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T-cell receptor be Ig heavy chain CRD Ig heavy chain C r sperm-activating p sperm-activating p spinal cord peptid T-cell receptor be sperm-activating p Ig heavy chain CDR T-cell receptor be sperm-activating p Ig heavy chain CDR T-cell receptor be
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sperm-activating p
collagen alpha 2(V
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sperm-activating
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sperm-activating
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                                                                                April 11, 2006, 19:18:59; Search time 38 Seconds (without alignments) 25.320 Million cell updates/sec
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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd
                                                                                                                                                                                                                                                                                        1102
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                                                                                                                                                                                                                                                          283416 segs, 96216763 residues
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                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                        protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Match Length DB
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1: pirl:*
2: pir2:*
3: pir3:*
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Maximum DB seq length: 10
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Perfect score:
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neuropeptide callatostatin 5 - bluebottle fly (Calliphora vomitoria)
C;Species: Calliphora vomitoria
C;Species: Calliphora vomitoria
C;Species: Calliphora vomitoria
C;Date: 16-Feb-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: E47393
R;Duve, H.; Johnsen, A.H.; Scott, A.G.; Yu, C.G.; Yagi, K.J.; Tobe, S.S.; Thorpe, A.P.; Droc. Natl. Acad. Sci. US.A. 90, 2456-2460, 1993
A;Title: Callatostatins: neuropeptides from the blowfly Calliphora vomitoria with seque

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Gaps ö

Score 19; DB 2; Length 8; Pred. No. 2.8e+05; 0; Mismatches 1; Indels

h 37.3%; Similarity 75.0%; 3; Conservative

Query Match Best Local Similarity Matches 3; Conserv

GSPY 9

9

GPPY

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A;Cross-references: UNIPROT:P41841; UNIPARC:UPI000002EAB5 A;Experimental source: whole files A;Note: sequence extracted from NCBI backbone (NCBIP:128482)

A,Status: preliminary A,Molecule type: protein A,Residues: 1-8 <DUV>

A, Accession: E47393

sperm-activating p		sperm-activating p	sperm-activating p						sperm-activating p	sperm-activating p		STORTH-BUTING D			מ המודים מרכז מינים מיני	primase - Citrobac H4 histone - Afric			- molloe (fracment)		994 #text change 17-Mar-1999	,		7, F. T. Med. 178. 317–329. 1993.	The state of the s	ם ב ב					a tri	57.75		DB 2; Length 9;	8e+05;	0; Indels 0; Gaps 0;			
C60527 .	E60527	G60527	E39572	D60788	REOZBB	00000	90,000	F60589	C60589	D60589	A60527	A60787	96058	20000		140/02 IS1434	ALIGNMENTS		(wild-tyme clone 142) -	7	C.Date: 02-Jun-1994 #Becmence revision 02-Jun-1994		T. Lodor D		100000000000000000000000000000000000000	A)iitte: Moleculai characcelization oi transgene-induced A;Reference number: PH1580; MUID:93301609; PMID:8315387				A; Cross-references: UNIPARC: UPI000017C6B2	A.Panarimantal course. hone marrow are-B lambocate	יייל היים אל אינים אל איני			Pred. No.	0; Mismatches			
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9 ,	7	35	33	34	35	36	0 6	7	38	39	40	4.1	4.5	7		4 4 5		RESULT 1	בלים דו בלה	Specie	Date	Access	orino.	T. Exn.		A;Refere	A: Access	A: Molecu	A: Residu	A:Cross-	i Pynori	. Keywor	, mar	Query Match	Best Local	Matchea	à	:	_ 임

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R;Feeney, A.J.
J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.
A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0627
                                                                                                                                                                                                                                                                                                                                                                                                  mediated by periplasmic and outer
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A;Title: Structures and actions of Mytilus inhibitory peptides.
A;Reference number: A90142; MUID:88240357; PMID:3377776
                                                                                                                                                                                                                                                                   C;Species: Pseudomonas syringae pv. tomato
C;Date: 19-Jun-1992 #sequence_revision 19-Jun-1992 #text_change 24-Jun-1993
C;Accession: A41225
R;Cha, J.S.; Cooksey. D.A.
Proc. Natl. Acad. Sci. U.S.A. 88, 8915-8919, 1991
A;Tille: Coppex resistance in Pseudomonas syringae mediated by periplasmic and A;Reference number: A41225, MUID:92020961; PMID:1924351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      contraction-inhibiting peptide I - blue mussel
C;Species: Wytilus edulis (blue mussel)
C;Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   T-cell receptor beta chain V-D-J region (100-2H) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
Gaps
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A;Residues: 1-6 <HIR>
A;Cross-references: UNIPROT: P13736; UNIPARC: UPI00001279E1
C;Reywords: amidated carboxyl end
P;6/Modified site: amidated carboxyl end (Val) #status experimental
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33.3%; Score 17; DB 2; Le
Best Local Similarity 100.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 0;
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2.8e+05;
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33.3%; Score 17; DB
Best Local Similarity 100.0%; Pred. No. 2.6
Matches 3; Conservative 0; Mismatches
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Molecule type: protein
A;Residues: 1-5 <CHA>
A;Cross-references: UNIPARC:UPI000017A9B5
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3; Conservative
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                                                  AGVGS 7
                                                                                                     4 SGLGS 8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                             Accession: A41225
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R; Yoshino, K.I.; Kajiura, H.; Nomura, K.; Takao, T.; Shimonishi, Y.; Kurita, M.; Yamagud R; Yoshino, K.I.; Kajiura, H.; Nomura, K.; Takao, T.; Shimonishi, Y.; Kurita, M.; Yamagud A; Title: A halogenated amino acid-containing sperm activating peptide and its related peotus nudus, Echinometra mathaei and Heterocentrotus mammillatus.
A; Reference number: A60527
                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Gene: nad5
A;Genome: mitochondrion
C;Keywords: mitochondrion; NAD; oxidative phosphorylation; oxidoreductase; respiratory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 collagen alpha 2(V) chain - bovine (fragment)
C;Species: Bos primigenius taurus (cattle)
C;Species: Bos primigenius taurus (cattle)
C;Species: Bos primigenius taurus (cattle)
C;Accession: S68865
R;Niyibizi, C.; Eyre, D.R.
Bur. J. Blochem. 224, 943-950, 1994
A;Title: Structural characteristics of cross-linking sites in type V collagen of bone.
                                                                                 (EC 1.6.5.3) chain 5 - rape mitochondrion (fragment)
                                                                                                                                                                                                                                                                                                                                                                           A, Cross-references: UNIPARC: UPI000011E90B; EMBL: U10423; NID: 91800190; PID: 91800192
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                                                                                                        .Species: mitochondrion Brassica napus (rape)
.Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 03-Jun-2002
.Accession: T09512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 16-Aug-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 18; DB 2; Length 7; Pred. No. 2.8e+05; 2; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2; Length 9;
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Pred. No. 2.8e+05;
                                                                                                                                                                                                           Whited to the EMBL Data Library, June 1994
A;Reference number: 216706
A;Accession: T09512
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Cross-references: UNIPARC: UPI000017A4DF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sperm-activating peptide b - sea u:
N;Alternate names: speract homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               35.3%;
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                                                                            dehydrogenase (ubiquinone)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Species: Pseudoboletia maculata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 60.0
Matches 3; Conservative
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A, Molecule type: protein
A, Residues: 1-8 < YOS>
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Best Local Similarity
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Best Local Similarity
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A; Status: preliminary
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C;Accession: 160588
R;Yoshino, K.I.; Kajiura, H.; Nomura, K.; Takao, T.; Shimonishi, Y.; Kurita, M.; Yamagu Ccomp. Biochem. Physiol. B 94, 739-751, 1989
A;Title: A halogenated amino acid-containing sperm activating peptide and its related gotus nudus, Echinometra mathaei and Heterocentrotus mammillatus.
A;Reference number: A60527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sperm-activating peptide (Glu-3,Met-4, Gly-5, Thr-7 SAP-1) - slate-pencil urchin (Heter
C,Species: Heterocentrotus mamillatus
C,Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 16-Aug-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 spinal cord peptide SCP-6 - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 28-Sep-1987 #sequence_revision 28-Sep-1987 #text_change 16-Aug-2004
C;Accession: C23751
R;Hsi, K.L.; Chen, R.L.; Chen, Z.G.; Zhang, H.L.; Lu, Y.A.; Guo, S.Y.; Wu, S.X.; Tsou, Arch. Blochem. Blochem. 240, 178-183, 1985
A;Reference number: A23751; MUID:85250425; PMID:4015098
                         A;Accession: G60787
A;Molecule type: protein
A;Residues: 1-10 <SUZA;
A;Cross-teferences: UNIPROT:Q7M4D8; UNIPARC:UPI000017A4D6
C;Comment: This oligopeptide from egg jelly is one of several from this species, all at shows some, but not absolute, species restriction.
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C;Species: Mus musculus (house mouse)
C;Becies: Mus musculus (house mouse)
C;Becies: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PT0623
R;Feeney, A.J.
                                                                                                                                                                                                                      Length 10;
                                                                                                                                                                                                                                                                        0; Indels
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Best Local Similarity 75.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 1; Indels
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A;Residues: 1-10 <YOS>
A;Cross-references: UNIPROT:Q7M4C0; UNIPARC:UP1000017A4EB
        A; Reference number: A60787; MUID:88242184; PMID:3378407
                                                                                                                                                                                                                 33.3%; Score 17; DB 2; 175.0%; Pred. No. 4.9e+03; ive 1; Mismatches 0
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Pred. No. 4.9e+03;
0; Mismatches 2.
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Best Local Similarity 75.0
Matches 3; Conservative
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A; Residues: 1-5 <HSI>
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7 SGVG 10
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Proc. Natl. Acad. Sci. U.S.A. 88, 1746-1750, 1991
A;Title: A serum heterodimer from hagfish (Eptatretus stoutii) exhibits structural simil A;Reference number: A39111; MUID:91156684; PMID:2000382
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Comp. Biochem. Physiol. B 89, 687-693, 1988
A;Title: Some more speract derivatives associated with eggs of sea urchins, Pseudocentrd
                                                                                                                                                                                                                                                                                                                                                                  Ig heavy chain CRD3 region (clone J2-106C) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 30-Sep-1993 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
C;Accession: PT0324
R;Yamada, M.; Wagserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
A;Title: Preferential utilization of specific immunoglobulin heavy chain diversity and A;Reference number: PT0222; MUID:91108337; PMID:1899102
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C;Species: Anthocidaris crassispina
C;Date: 03-Jun-1993 #sequence_revision 03-Jun-1993 #text_change 16-Aug-2004
C;Accession: G60787
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C;Species: Bptatretus stouti (Pacific hagfish)
C;Date: 18-Oct_1991 #sequence_revision 18-Oct-1991 #text_change 16-Aug-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
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Pred. No. 2.8e+05;
3; Indels
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Pred. No. 4.9e+03;
1; Mismatches 2; Indels
                                                                                                                                0, Indels
                                                                              Length 8;
                                                                           Score 17; DB 2; I
Pred. No. 2.8e+05;
1; Mismatches 0;
A, Experimental source: newborn thymus, strain BALB/c
C, Keywords: T-cell receptor
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A;Experimental source: B lymphocyte
C;Keywords: heterotetramer; immunoglobulin
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C; Keywords: heterotetramer; immunoglobulin
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A;Molecule type: protein
A;Residues: 1-10 <VAR>
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5 AGLG 8
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J. Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions. A;Reference number: PT0509; MUID:91277601; PMID:1711558
A;Accession: PT0623
A;Accession: PT0623
A;Accession: PT0624
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Cross-references: UNIPARC:UP1000017C7CB
A;Cross-references: UNIPARC:UP1000017C7CB
C;Keywords: T-cell receptor
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Best Local Similarity 75.0
Matches 3; Conservative
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3 AGVG 6 AGTG 7

ઠે 윱 T-cell receptor beta chain V-D-J region (111-11) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PT0631
R;Feenery, A.J.
J; Exp. Med. 174, 115-124, 1991
A;Title: Junctional sequences of fetal T cell receptor beta chains have few N regions.

A;Accession: PT0631
A;Status: translation not shown
A;Molecule type: mRNA
A;Residues: 1-8 <FEE>
A;Cross-references: UNIDARC:UDI000017C7D4
A;Experimental source: newborn thymus, strain BALB/c
C;Keyworde: T-cell receptor

1; Indels Query Match
31.4%; Score 16; DB 2; Length 8;
Best Local Similarity 75.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 0; Mismatches 1; Indels

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5 AGTG 8

Search completed: April 11, 2006, 19:23:18 Job time : 39 8ecs

Searched:

Sequence:

Run on:

Database :

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TISSUE-Cerebral ganglion, and Thoracic ganglion,
MEDLINE-98121193; PubMed-9461295;
Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Jaros P.P.,
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                                                                         April 11, 2006, 19:15:49; Search time 229 Seconds (without alignments) 30.809 Million cell updates/sec
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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
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00744 00744 00744 00744	ALIGNMENTS T 1 5 LYCES OGGTGS_LYCES PRELIMINARY; PRT; 8 AA. OGGTGS_LYCES PRELIMINARY; PRT; 8 AA. O1-MAR-2003 (TrEMBLrel. 23, Last sequence update) O1-MAR-2003 (TrEMBLrel. 23, Last annotation update) O1-MAR-2003 (TrEMBLrel. 23, Last annotation update) MRKY transcription factor IId-1 splice variant 2 (Fragment). Lycopersicon esculentum (Tomato). Lycopersicon esculentum (Tomato). Spermatophyta; Magnoliophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; endicotyledons; core endicots; asterids; lamiids; Solanales; Solanaceae; Solanum; Lycopersicon.	., Zhou A., Wanke D., Somssich I.E.; e EMBL/GenBank/DDBJ databases. ; -; mRNA. 59177B4775B87330 CRC64; ; Score 24; DB 2; Length 8; ; Score 24; DB 2; Length 8; ; Pred. No. 2.2e+06; 0; Mismatches 0; Indels 0; Gaps 0;	PRT; 8 AA. pence update) totation update) crab) (Green crab).	₩~
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This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
      Callatostatin-5 (Met-callatostatin.) ([Hyp3]Met-callatostatin).
Calliphora vomitoria (Blue blowfly).
Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Eterygota;
Neoptera, Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
Calliphoridae; Calliphora.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Duve H., Johnsen A.H., Scott A.G., East P., Thorpe A.;

[Hyp3]Met-callatostatin. Identification and biological properties of a novel neuropeptide from the blowfly Calliphora vomitoria.";

J. Biol. Chem. 269:21059-21066(1994)

J. Biol. Chem. 269:21059-21066(1994)

In the integration of information within the brain. May be involved in the integration of information within the brain. May be have as potent inhibtors of peristalic movements. May also fillfill a neurohomonal role on muscles of the gut and heart.
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Mammalia, Butheria, Buarchontoglires, Primates, Catarrhini, Hominidae,
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                                                                                                                                                                                                                                                                                                                                 Thorpe A.; "Callatostatins: neuropeptides from the blowfly Calliphora vomitoria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -i- TISSUE SPECIFICITY: Neurons within brain and abdominal ganglion.
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Amidation; Direct protein sequencing; Hydroxylation; Neuropeptide.
Hydroxyproline (partial).
                                                                                                                                                                                                                                                                                                 Duve H., Johnsen A.H., Scott A.G., Yu C.G., Yagi K.J., Tobe
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                                                                                                                                                                                                                                                                                                                                                                                             with sequence homology to cockroach allatostatins.";
Proc. Natl. Acad. Sci. U.S.A. 90:2456-2460(1993).
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   05-JUL-2004 (Rel. 44, Last annotation update)
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                                                                               This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
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-I. FUNCTION: May act as a neurotransmitter or neuromodulator.
-!- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Jaros P.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca; Bualaleostraca; Bucarida; Decapoda; Pleocyemata; Brachyura; Bubrachyura; Portunoidea; Portunidae; Carcinus.
                                                                                                                                                                                                                                                                                                                                                                                       39.2%; Score 20; DB 1; Length 8; 75.0%; Pred. No. 2.2e+06; tive 0; Mismatches 1; Indels
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                         SIMILARITY: Belongs to the allatostatin family.
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8 AA; 813 MW; 7C286B45AB476878 CRC64;
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30-MAY-2000 (Rel. 39, Last sequence update)
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(Rel. 32, Last sequence update)
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SUBCELLULAR LOCATION:
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Mammalia, Butheria, Buarchontoglires, Primates, Catarrhini, Hominidae,
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MEDLINE=93076813; PubMed=1332868;
Peers B., Nalda A.M., Monget P., Voz M.L., Belayew A., Martial J.A.;
Peers B., Nalda A.M., Monget P., Voz M.L., Belayew A., Martial J.A.;
Binding of a loob ubiquitous factor to the human prolactin
promoter 1s required for the basal and hormone-regulated activity.";
Eur. J. Biochem. 210:53-58(1992).
EMBL; X00368; CAA25108.1; -; Genomic_DNA.
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MEDLINE-84182507; PubMed-6325171;
Truong A.T., Duez C., Belayew A., Renard A., Pictet R.L., Bell G.I.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bacteriophage b<u>T</u>1170.
Viruses, dsDNA viruses, no RNA stage, Caudovirales, Siphoviridae.
NCBI_TaxID=63118;
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                                                                                                                                                                                                                                                                                                                                                                                         "Isolation and characterization of the human prolactin gene.";
EMBO J. 3:429-437(1984).
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                                                                     h 37.3%; Score 19; DB 2; Length 9; Similarity 57.1%; Pred. No. 2.2e+06; 4; Conservative 1; Mismatches 2; Indels
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                                                                                                                                                                                                                                       Last sequence update)
Last annotation update)
organization in two genes.";
J. Biol. Chem. 268:13010-13010(1993).

BMBL; S62577; AAB27101.1; -; Genomic_DNA.

SRQÜENCE 9 AA; 995 MW; 8C8EA5B877376DDA CRC64;
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Pred. No. 2.2e+06;
1; Mismatches 0;
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75.0%;
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067809;
25-007-2004 (TYEMBLYEL) 28,
25-007-2004 (TYEMBLYEL) 28,
25-007-2004 (TYEMBLYEL) 28,
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01-MAY-2000 (TrEMBLrel. 13,
01-JUN-2003 (TrEMBLrel. 24,
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QOUQWO;
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MEDLINE=22967687; PubMed=12949142; DOI=10.1093/molbev/msg206;
Inoue J.G., Miya M., Tsukamoto K., Nishida M.;
"Evolution of the deep-sea gulper eel mitochondrial genomes: largescale gene rearrangements originated within the eels.";
Mol. Biol. Bvol. 20:1917-1924(2003).
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Actinopterygii; Neopterygii; Teleostei; Anguilliformes;
Eurypharyngidae; Eurypharynx.
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                                                                                                                                                                                                                                              37.3%; Score 19; DB 2; Length 10; 80.0%; Pred. No. 1.7e+04; tive 1; Mismatches 0; Indels
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10 AA; 1293 MW; 356FAE29C682DB47 CRC64;
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
NADH dehydrogenase subunit 2 (Fragment).
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Pred. No. 1.7e+04;
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EMBL; AY375289; AAR26461.1; -; Genomic_DNA.
NON_TER 1
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NADH dehydrogenase subunit 2·(Fragment)
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                                                                                                                                      10 AA; 997 MW;
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Q76MK9;
                                                                                                                                                                                                                                                                                                           Local Similarity 80.0 nes 4; Conservative
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GAPQPFV 8
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Best Local Similarity
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"Role of the open reading frames of Rous sarcoma virus leader RNA in translation and genome packaging.";
EMBO J. 11:3747-3757(1992).
EMBL, X67587; CA474862.1; -; Genomic RNA.
SEQUENCE 7 AA; 672 MW; 776045A7687D6F0 CRC64;
MEDLINE=22967687; PubMed=12949142; DOI=10.1093/molbev/msg206; Inoue J.G., Miya M., Tsukamoto K., Nishida M.; Evolution of the deep-sea gulper eel mitochondrial genomes: largescale gene rearrangements originated within the eels."; Mol. Biol. Evol. 20:1917-1924 (2003).
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TISSUE-Cerebral ganglion, and Thoracic ganglion;
MEDLINE-98121193; PubMed=9461295;
Duve H., Johnsen A.H., Maestro J.-L., Scott A.G., Jaros P.P.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALL7_CARMA STANDARD, PRT; 8 AA.
P81805; P81804; P81810;
30-MAY-2000 (Rel. 39, Last sequence update)
30-MAY-2000 (Rel. 39, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Carcinus maenas (Common shore crab) (Green crab)
Carcinus maenas (Common shore crab) (Green crab)
Eumalacostraca; Arthropoda, Crustacca; Malacostraca;
Eumalacostraca; Pucarida; Decapoda; Pleocyemata;
Eubrachyura; Portunoidea; Portunidae; Carcinus.
                                                                                                                                                                                                                                                                                                     Score 19; DB 2; Length 10;
Pred. No. 1.7e+04;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              35.3%; Score 18; DB 2; Length 7; 57.1%; Pred. No. 2.2e+06; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rous sarcoma virus.
Viruses; Retroid viruses; Retroviridae; Alpharetrovirus.
NCBI_TaxID=11886;
                                                                                                                                        Inoue J., Inoue J., Miya M., Tsukamoto K., Nishida M.; Submitted (JUL-2000) to the KMBL/GenBank/DDBJ databases EMBL; AB046477; BAB87140.1; -; Genomic_DNA. GO, GO:0005739; C:mitochondrion; IEA.
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10 AA; 1261 MW; 357BFE29C682DB47 CRC64;
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Last annotation update)
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MEDLINE=93010967; PubMed=1327749;
                                                                                                                                                                                                                                                                                                       37.38;
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                                                                                                                                                                                                                                                                                  Query Match.

Best Local Similarity 75.v.,

Best Acas 3; Conservative
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007624;
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Best Local Similarity
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                                                                                                                                                                                                            Mitochondrion.
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NPYV 5
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This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bloinformatics and the EMBL outstation the Buropean Bloinformatics Institute. There are no restrictions on its
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                                                                                                                                                                                                                                                                                                                                                                                                                                   Amidation; Direct protein sequencing; Multigene family; Neuropeptide. PEPTIDE 1 8 Carcinustatin-7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Maule A.G.; "Industriation and pharmacology of RWRFamide-related "Isolation, characterization and peptides (FaRPs) from free-living nematode, Panagrellus redivivus."; Submitted (JUL-2000) to Swiss-Prot.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROTEIN SEQUENCE, FUNCTION, AND AMIDATION.
Moffett C.L., Marks N.J., Halton D.W., Thomson D.P., Geary T.G.,
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-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
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"Inocation and identification of multiple neuropeptides of the allatostatin superfamily in the shore crab Carcinus maenas.";
Eur. J. Blochem. 250:727-734(1997).
-1. FUNCTION: May act as a neurotransmitter or neuromodulator.
-1. SUBCEDIALIAR LOCATION: Secreted.
-1. SUBLETIY: Belongs to the allatostatin family.
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Pred. No. 2.7e+04;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          35.3%; Score 18; DB 1; Length 8; 100.0%; Pred. No. 2.2e+06; ive 0; Mismatches 0; Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota, Metazoa, Nematoda, Chromadorea, Rhabditida,
Panagrolaimoidea, Panagrolaimidae, Panagrellus
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MOD RES 10 10 Phenylalanine amide.

SEQUENCE 10 AA; 1132 MW; CB13E4C9D776C76D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-2004 (Rel. 40, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
FMRFamide-like neuropeptide PF6 (NGAPQPFVRF-amide).
Bukarver
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         825 MW; 922879CDCB4775BD CRC64;
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16-OCT-2001 (Rel. 40, Last seq
05-JUL-2004 (Rel. 44, Last anno
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Similarity 42.9%;
3; Conservative
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Actinopterygii, Neopterygii, Teleostei, Euteleostei, Neoteleostei,
Acanthomorpha, Acanthopterygii, Percomorpha, Perciformes, Labroidei,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mabuchi K., Miya M., Satoh T.P., Westneat M.M., Nishida M.; "Gene Rearrangements and Evolution of tRNA Pseudogenes in the Mitochondrial Genome of the Parrotfishes (Teleostei: Perciformes:
                                                                                                                                                                                                                                                                                                                                                                                                        Neurospora crassa.
Eukaryota; Pungi; Ascomycota; Pezizomycotina; Sordariomyceťes;
Sordariomycetidae; Sordariales; Sordariaceae; Neurospora.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 18; DB 2; Length 10;
Pred. No. 2.7e+04;
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EMBL; AABX01000206; EAA33304.1; -; Genomic DNA.
SEQUENCE 10 AA; 1284 MW; D6D34CB72DC40059 CRC64;
                                                                                                                                                                               Created)
Last sequence update)
Last annotation update)
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Last annotation update)
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EMBL, AB117556; BAD51879.1; -; Genomic_DNA.
GO; GO:0005739; C:mitochondrion; IEA.
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NADH dehydrogenase subunit 1 (Fragment).
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Q60HP3 9LABR
ID Q60HP3_9LABR PRELIMINARY;
                                                                                     O7SA62_NEUCR PRELIMINARY;
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NCBI_TaxID=242818;
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NUCLEOTIDE SEQUENCE.
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RESULT 13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
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                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE-Pedal ganglion;
MEDLINE-88240357; PubMeda-337776;
MEDLINE-88240357; PubMeda-337776;
MITIATE T., Kubota I., Iwasawa N., Takabatake I., Ikeda T., Muneoka Y.;
"Structures and actions of Mytilus inhibitory peptides.";
Biochem. Biophys. Res. Commun. 152:1376-1382(1988).
-: PUNCTION: Inhibitory action on contractions in several molluscan
                                                                           Gaps
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                                                                                                                                                                                                                                                                                                                       Bukaryota, Metazoa, Mollusca, Bivalvia, Pteriomorphia, Mytiloida,
Mytiloidea, Mytilidae, Mytilinae, Mytilus.
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              4703C37760587DD7 CRC64;
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637 MW; 72C9C68775B81000 CRC64;
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Pred. No. 2.2e+06;
                                           Score 18; DB 2;
Pred. No. 2.7e+04;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Amidation, Direct protein sequencing, Hormone.
                                                                                                                                                                                                                                               01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
01-EBB-2005 (Rel. 46, Last annotation update)
Contraction-inhibiting peptide I (MIP I).
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Conservative 0;
1 1
10 AA; 1030 MW;
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                                                      Best Local Similarity
Matches 3; Conser
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(es 3; Conserv
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SEQUENCE
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April 11, 2006, 19:34:56; Search time 47 Seconds (without alignments) 17.591 Million cell updates/sec
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
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(cgn2_6/ptodata/1/iaa/5_COMB.pep:*
(cgn2_6/ptodata/1/iaa/6_COMB.pep:*
(cgn2_6/ptodata/1/iaa/H_COMB.pep:*
(cgn2_6/ptodata/1/iaa/PCTUS COMB.pep:*
(cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
(cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
(cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
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US-08-414-4178-29
US-08-468-5458-29
US-08-466-6808-29
US-09-341-982-95
US-09-354-533-29
PCT-USS-14415-112
US-09-979-338A-31
US-09-979-338A-31
US-09-979-338A-31
US-09-979-338A-31
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US-09-979-338A-69
US-08-486-5458-69
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US-08-468-6808-69
US-08-468-6808-69
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US-08-468-6808-69
US-08-468-6808-69
US-08-448-4178-68
US-08-444-4178-68
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Maximum Match 100%
Listing first 45 summaries
                                                                                - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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51
1 VMAGVGSPYV 10
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GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/new PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/new ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                   SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,348A
FILING DATE: US-JUN-1995
CLASSIPICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: F-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,545B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

100.0%; Score 51; DB 1;

Best Local Similarity 100.0%; Pred. No. 0.0097;

Matches 10; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                              ATTORNEY AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C6
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
TELEPAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
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NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C5
TELECOMMUNICATION INFORMATION:
                     COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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; Sequence 29, Application US/08468545B
; Patent No. 5876712
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STATE: Washington
COUNTRY: US
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ZIP: 98104-7092
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US-08-486-348A-29
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                                                                                                                                                                                                                                              APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
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Pred. No. 0.0097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTE: PALGATION:

MEDIUM TYPE: Floppy disk
COMPUTER: ENDAPY disk
COMPUTER: Floppy disk
COMPUTER: ENDAPY disk
COMPUTER: ENDAPY disk
COMPUTER: DATE:
OPERATION SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,417B
FLING DATE: 31-MAR-1995
CLASSIFICATION: 424
ATTORNEY AGENT INFORMATION:
NAME: Sharkey, Richard G.
REFERENCE/DOCKET NUMBER: 920010.448C2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
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                                                                                                                                                                        Sequence 29, Application US/08414417B Patent No. 5801005 GENERAL INFORMATION:
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Patent No. 5846538
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEO ID NO: 29
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
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                                                VMAGVGSPYV 10
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STATE: Washington
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US-08-414-417B-29
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ZIP: 98104-7092
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                                                                                                                                                   US-08-414-417B-29
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US-08-486-348A-29
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Gaps
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; OTHER INFORMATION: Description of Artificial Sequence: Fragment of
; OTHER INFORMATION: human protein
US-09-341-982-95
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       OF INVENTION: CYTOTOXIC LYMPHOCYTES, AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Epimmune Inc.
TITLE OF INVENTION: HIA Class I A2 Tumor Associated Antigen
TITLE OF INVENTION: Peptides and Vaccine Compositions
FILE REFERENCE: 018623-015710US
CURRENT APPLICATION WUMBER: US/09/543,608A
CURRENT FILING DATE: 2002-04-05
NUMBER OF SEQ ID NOS: 52
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 16
SEQ ID NO 16
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Pred. No. 0.0097;
                                                                CURRENT FILING DATE: 1999-09-20
EARLIER APPLICATION NUMBER: PCT/US98/01592
EARLIER FILING DATE: 1998-01-29
EARLIER APPLICATION NUMBER: 60/037,781
EARLIER FILING DATE: 1997-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 51;
100.0%; Pred. No. (
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Patent No. 6664370
GENERAL INFORMATION:
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US-09-543-608A-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                       TYPE: PRT ORGANISM: Artificial Sequence
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ORGANISM: Artificial Sequence
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Southwood, Scott
Celis, Esteban
Keogh, Elissa A.
                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 104
SOFTWARE: Patentin Ver: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
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Best Local Similarity 100
Matches 10; Conservative
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                                                                                                                                                                                                                                        SEQ ID NO 95
LENGTH: 10
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                                                                                                                                                                                                                                                                                                                               Sequence 29, Application US/08466680B
Patent NO. 6075122
GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: SLINGLUFF, Craig L.
APPLICANT: HUNT, Donald F.
APPLICANT: BUGELHARD, Victor H.
APPLICANT: KITTLESEN, David
TITLE OF INVENTION: CYSTEINE-DEPLETED PEPTIDES RECOGNIZED BY A3-RESTRICTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
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                                                                       100.0%; Score 51; DB 1; Length 10; 100.0%; Pred. No. 0.0097;
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ZIP: 98104-7092
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/466,680B
FILING DATE: 06-UNN-1995
FILING DATE: 06-UNN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S: Seed and Berry LLP
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 95, Application US/09341982
Patent No. 6558671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGERT INPORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,628
REFERENCE/DOCKET NUMBER: 920
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TELEPAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                  Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.
Best Local Similarity 100
Matches 10; Conservative
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                   1 VMAGVGSPYV 10
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STATE: Washington
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; TOPOLOGY: linear
US-08-468-545B-29
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Gaps
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OTHER INFORMATION: Description of Artificial Sequence: Amino acid
OTHER INFORMATION: resolved product using the construct shown in FIG
OTHER INFORMATION: 5.
US-09-979-338A-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 27, Application US/09979338A

Sequence 27, Application US/09979338A

Patent No. 6846622

GENERAL INPORMATION:

APPLICANT: Heffron et al.

TITLE OF INVENTION: Tagged Epitope Protein Transposable Element
FILE REFERENCE: 61589

CURRENT APPLICATION NUMBER: US/09/979,338A

CURRENT FILING DATE: 2001-11-21

PRIOR APPLICATION NUMBER: PCT/US00/14687

PRIOR PILING DATE: 1099-05-26

NUMBER OF SEQ ID NOS: 33

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 27

LENGTH: 82
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GENERAL INFORMATION:

APPLICANT: Heffron et al.

TITLE OF INVENTION: Tagged Epitope Protein Transposable Element
FILE REFERENCE: 61599

CURRENT APPLICATION NUMBER: US/09/979,338A

CURRENT APPLICATION NUMBER: PCT/US00/14687

PRIOR APPLICATION NUMBER: PCT/US00/14687

PRIOR PILING DATE: 2000-05-26

PRIOR APPLICATION NUMBER: 60/136,210

PRIOR APPLICATION NUMBER: 60/136,210

PRIOR APPLICATION NUMBER: 30/136,210

SPRIOR PRING DATE: 1999-05-26

NUMBER OF SEQ ID NOS: 33

SOFTWARE: PATENTIN OF 2.1
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                                                                                                                                                                                                                                                                                                                                    Length 10;
                                                                                                                                                                                                                                                                                                                                    Query Match 100.0%; Score 51; DB 4; Best Local Similarity 100.0%; Pred. No. 0.0097; Matches 10; Conservative 0; Mismatches 0
                             433.1PC
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Patent No. 6846622
  REGISTRATION NUMBER: 33,950
                   REFERENCE/DOCKET NUMBER: 4.
TELECOMMUNICATION INFORMATION
                                                                      TELEPHONE: (619) 554-2937
TELEFAX: (619) 554-6312
INFORMATION FOR SEQ ID NO: 12: SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 VMAGVGSPYV 10
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                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
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US-09-979-338A-27
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FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE HER-2/neu ONCOGENE IS ASSOCIATED
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
COMPUTER: Ploppy disk
COMPUTER: Tab FC compatible
COMPUTER: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATE:
APPLICATION NUMBER: US/09/354,533
FILING DATE: 15-Jul-1999
CIASSIFICATION: CURROWALION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET WUMBER: 920010.448C9
TELECOMMUNICATION INMERE: 920010.448C9
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
100.0%; Score 51; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0097;
Matches 10; Conservative 0; Mismatches 0; Indels
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APPLICANT: The Scripps Research Institute
APPLICANT: The Scripps Research Institute
APPLICANT: The Scripps Research Institute
TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC
TITLE OF INVENTION: CYTOTOXIC T CELLS
NUMBER OF SEQUENCES: 38
CORRESPONDENCE ADDRESS:
ADDRESSEE: The Scripps Research Institute
STREET: 10666 North Torrey Pines Road, TPC-8
                                                                                                       ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: Parentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
FILING DATE: 13-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE DESCRIPTION: SEQ ID NO: 29:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/355,558
FILING DATE: 14-DEC-1994
ATTORNEY AGENT INFORMATION:
NAME: Logan, ADX11 C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (206) 682-6031 INFORMATION FOR SEQ ID NO: 29:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
STRANDEDNESS: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                 STATE: Washington
COUNTRY: US
ZIP: 98104-7092
                                                      NUMBER OF SEQUENCES: 69
                                                                                                                                                           CITY: Seattle
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STATE: California
COUNTRY: US
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STREET: 6300 Colur
CITY: Seattle
STATE: Washington
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                                                                                 FEATURE:
COTHER INFORMATION: Description of Artificial Sequence: Amino acid
OTHER INFORMATION: resolved product using the construct shown in f
COTHER INFORMATION: FIG 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 66, Application US/07857224B
Patent No. 5958784
GENERAL INFORMATION:
APPLICANT: Benner, Steven A.
TITLE OF INVENTION: Predicting Folded Structures of Proteins NUMBER OF SEQUENCES: 114
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                             Query Match
100.0%; Score 51; DB 2; Length 92;
Best Local Similarity 100.0%; Pred. No. 0.086;
Matches 10; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: Switzerland
ZIP: (note: this is an international post code)
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch diskette, 1.4 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
100.0%; Score 51; DB 1;
Best Local Similarity 100.0%; Pred. No. 0.24;
Matches 10; Conservative 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: human
FEATURE: Protein kinase; Table 8 Column 75
FUBLICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: Apple MacIntosh OPERATING SYSTEM: MacIntosh 7.0 SOFTWARE: Microsoft Word CURRENT APPLICATION DATA: APPLICATION NUMBER: US/07/857,224B FILING DATE: 03/25/92 CLASSIPICATION: 436 PRIOR APPLICATION DATA: none TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS: Hanks, S. K.
AUTHORS: Quinn, A. M.
AUTHORS: Hunter, T.
TITLE: The protein kinase family
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E: Steven A. Benner
Hadlaubstrasse 151
SEQ ID NO 31
LENGTH: 92
TYBE: PR
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEX: none
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE:
DESCRIPTION: protein
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                   1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                             47 VMAGVGSPYV 56
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
US-07-857-224B-66
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Sequence 69, Application US/08414417B

Patent No. 5801005

GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN

TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Martin A.
APPLICANT: Dists, Mary L.
TITLE OF INVENTION: POR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,417B
FILING DATE: 31-MAR-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C2
TELECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                E: Seed and Berry LLP 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 51; DB 1, 100.0%; Pred. No. 0.52;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: US
ZIF: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-486-348A-69
; Sequence 69, Application US/08486348A
; Patent No. 5846538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE: (206) 622-4900
TELEPAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                    TITLE OF INVENTION: INVENTION: INVENTION: FOR TITLE OF INVENTION: FOR UNBER OF SEGUENCES: 69 CORRESPONDENCE ADDRESS: ADDRESSEE: Seed and Be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.
hes 10; Conservative
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56 VMAGVGSPYV 65
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CITY: Seattle
STATE: Washington
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US-08-414-417B-69
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Sequence 69, Application US/08468545B
Patent No. 5876712
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Cheever, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
CORRESPONDENCES: 69
CORRESPONDENCES: 69
CORRESPONDENCES: 69
CORRESPONDENCES: 60
CORRESPONDEN
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COMPUTRY: US
ZIP: 98104-7092
ZIP: 98104-7092
COMPUTRR READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTRR: PROPRY disk
COMPUTRR: PACENDALIDE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PACENTIN PRE-Lase #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,545B
FILING DATE: 06-UNA-1995
CLASSIFICATION: 424
ATYCRNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REFERENCE/DOCKET NUMBER: 32.620
REFERENCE/DOCKET NUMBER: 92010.448C5
TELEPAN: (206) 62-6031
TELEPAN: (206) 62-6031
; INFORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
'FWACTH: 580 amino acide
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/486,348A
FILING DATE: 07-010-1995
CLASSIFICATION NUMBER: 02-010-448C6
TELECOMMUNICATION NUMBER: 920010.448C6
TELECOMMUNICATION NUMBER: 920010.448C6
TELECOMMUNICATION NUMBER: 92001
TELEPAX: (206) 692-6031
INPORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
LENGTH: 580 amino acids
TYPE: amino acids
TYPE: Amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98 VMAGVGSPYV 107
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TOPOLOGY: linear
US-08-486-348A-69
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STATE: Washing
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US-08-468-545B-69
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Sequence 12, Appl
Sequence 49, Appl
Sequence 620, Appl
Sequence 2352, App
Sequence 4432, App
Sequence 4432, App
Sequence 620, Appl
Sequence 620, Appl
Sequence 16, Appl
Sequence 31, Appl
Sequence 29, Appl
Sequence 31, Appl
Sequence 4432, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                        April 11, 2006, 19:35:40; Search time 166 Seconds (without alignments) 25.170 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 49,
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Sequence
Sequence
Sequence
Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Published Applications AA Main:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-149-138-4335
US-10-149-138-4422
US-10-149-138-4435
                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                1867569 segs, 417829326 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                  - protein search, using sw model
                                                                                                                                                                                                                                                                                                  BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                             US-09-277-064-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum DB seq length: 0
Maximum DB seq length: 20000000
                                                                                                                                                                                                                                 51
1 VMAGVGSPYV 10
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Match Length DB
                                                                                                                                                                                                             Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                  Scoring table:
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                                                                                    OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database :
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Sequence 3736, Ap Sequence 4400, Ap Sequence 4500, Ap Sequence 3728, Ap Sequence 3736, Ap Sequence 4473, Ap Sequence 452, Ap Sequence 24, Appl Sequence 622, App Sequence 642, App Sequence 642, App Sequence 642, App Sequence 64, Applised 64, Applised 64, Applised 64, Applised 64, Applised 65, Applised 66, Applise	HLA-RESTRICTED TUMOR	0; 0, Gaps 0;
28 51 100.0 15 4 US-10-149-138-3736 5 29 51 100.0 15 4 US-10-149-138-4473 5 30 51 100.0 15 4 US-10-149-138-4473 5 31 51 100.0 15 4 US-10-149-138-4562 5 32 51 100.0 15 4 US-10-149-138-3728 5 33 51 100.0 15 4 US-10-149-138-3736 5 34 51 100.0 15 4 US-10-149-138-3736 5 35 51 100.0 15 4 US-10-149-138-4736 5 36 51 100.0 15 4 US-10-149-138-4500 5 37 51 100.0 18 4 US-10-149-138-4500 5 38 51 100.0 18 4 US-10-149-138-4500 5 39 51 100.0 18 4 US-10-245-34-520-24 5 41 51 100.0 23 4 US-10-245-31-286-622 5 42 51 100.0 126 4 US-10-333-430-70 5 43 51 100.0 176 5 US-10-801-266-6 5 44 51 100.0 289 5 US-10-801-266-6 5 45 51 100.0 391 5 US-10-378-393-15	RESULT 1 US-08 = 12.393A-49 1 US-08 = 12.393A-49 1 US-08 = 12.393A-49 1 US-08 = 12.393A-49 1 US-08 = 12.393A-49 1 US-08 = 12.393A-49 2 ENDICATION NO. USZOONO007152A1 2 ENDICATION NO. USZOONO007152A1 2 APPLICANT: SHERANA Linda A. 1 TILLE OF INVENTION: NECOMBINANT CONSTRUCTS ENCODING 1 TILLE OF INVENTION: NCELL RECEPTORS SPECIFIC FOR HUMAN HLA-RESTRICTED TUMORS 1 TILLE OF INVENTION: NCELL RECEPTORS SPECIFIC FOR HUMAN HLA-RESTRICTED TUMORS OF SEQUENCES: 4 CORRESSONDENCE ADDRESS: 4 CORRESSIE: MORNISON & POERSTER STREET: 2000 Pennsylvania Avenue, NW, suite 5500 STATE: Namington STATE: DC COUNTRY: USA INFORMATION DATA: DISACTEC COMPUTER: IBM COMPATIDLE COMPUTER: IBM COMPATIDLE COMPUTER: IBM COMPATIDLE COMPUTER: IBM COMPATIDLE COMPUTER: DS COMPUTER: 1900 PENNS NAMING SPLICATION NUMBER: USO SOFTANDE FILING DATE: OF-MAR-1997 CLASSIFICATION NUMBER: 29.959 RESISTRATION DATA: PENNANTION: NAME: MALEABLIGE KELP HUMBER: 31333-20001.00 TELECOMMUTCHION NUMBER: 31333-20001.00	TELEX: INFORMATION FOR SEQ ID NO: 49: SEQUENCE CHARACTERISTICS: IENGTH: 10 amino acids TYRE: amino acids STRANDEDNESS: single STRANDEDNESS: single TOPOLOGY: linear US-08-812-393A-49 100.0%; Score 51; DB 2; Length 10; Best Local Similarity 100.0%; Pred. No. 0.016; Matches 10; Conservative 0; Mismatches 0; Indels
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GENERAL INFORMATION:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Sunol Molecular Corporatiopn
APPLICANT: Sherman, Linda
APPLICANT: Lustgarten, Joseph
TITLE OF INVENTION: RECRETORS SPECIFIC FOR HUMAN HIA-RESTRICTED TUMOR ANTIGENS;
FILE REFERENCE: 31333-20001.01
CURRENT APPLICATION NUMBER: US 08/812,393
PRIOR APPLICATION NUMBER: US 08/812,393
PRIOR APPLICATION NUMBER: US 60/012,845
PRIOR APPLICATION NUMBER: US 60/012,845
PRIOR FILING DATE: 1996-03-05
PRIOR FILING DATE: 1996-03-05
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 49
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 12, Application US/09277064

Sequence 12, Application US/09277064

Publication No. US20030064916A1

GENERAL INFORMATION:

APPLICANT: Sherman, Linda A.

TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS

FILE REPERENCE: SCR2152S

CORRENT APPLICATION NUMBER: US/09/277,064

CURRENT FILING DATE: 1999-03-26

PRIOR APPLICATION NUMBER: 08/355,558

PRIOR APPLICATION NUMBER: PCT/US95/16415

PRIOR APPLICATION NUMBER: PCT/US95/16415

PRIOR APPLICATION NUMBER: PCT/US95/16415

SEQ ID NOS: 39

SOFTWARE: PatentIn Ver. 2.1

LENGTH: 10
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                                                                                                                                                 100.0%; Score 51; DB 3; 100.0%; Pred. No. 0.016;
                                                                                                                                                                                                  0; Mismatches
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ORGANISM: Artificial Sequence
FRETURE:
OTHER INFORMATION: Synthesized peptide
15-07-174-681-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.09-774-681-49
Sequence 49, Application US/09774681
Publication No. US20030208780A1
                                                                                                                                                   Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
; SEQ ID NO 12
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-277-074-12
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ORGANISM: Homo sapiens
US-09-277-064-12
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US-09-277-074-12
| Sequence 12, Application US/09277074
| Publication No. US20030022820A1
| GENERAL INFORMATION:
| APPLICANT: Shemman, Linda A. | TITLE OF INVENTION:
| TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS
| TITLE TILING DATE: 199-03-26
| CURRENT FILING DATE: 199-12-14
| PRIOR APPLICATION NUMBER: 08/355,558
| PRIOR PELING DATE: 1994-12-14
| PRIOR PILING DATE: 1995-12-14
| NUMBER OF SEQ ID NOS: 39
| SOFTWARE: PATENTING DATE: 1995-12-14
                                                                                                                                                                                                    Distation NO. J. B. GENERAL INFORMATION:

APPLICANT: Cheever, Martin A.
Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
FOR DIAGNOSIS AND TREATMENT OF MALIGNAN
HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Seattle
COUNTRY: Washington
COUNTRY: Washington
COUNTRY: DAID4-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
COMPUTER: ISM PC compatible
CORPUTER: DAID4 PC COMPACIBLE
COMPUTER: OSYSTEM: PC-DOS/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/354,533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                y Match 100.0%; Score 51; DB 3; Length 10; Local Similarity 100.0%; Pred. No. 0.016; nee 10; Conservative 0; Mismatches 0. Thanh
                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE DESCRIPTION: SEQ ID NO: 29:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE: 15-Jul-1999
CLASSIFICATION: «Unknown»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                Sequence 29, Application US/09354533
Publication No. US20020055614A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEFAX: (206) 682-6031 INFORMATION FOR SEQ ID NO: 29: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: amino acid
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            VMAGVGSPYV 10
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APPLICANT: Chemut, Scott
APPLICANT: Chemut, Robert
APPLICANT: Celis, Esteban
APPLICANT: Celis, Esteban
TITLE OF INVENTION: Inducting Cellular Immune Responses to
TITLE OF INVENTION: Inducting Cellular Immune Responses to
TITLE OF INVENTION: Unducting Cellular Immune Responses to
TITLE OF INVENTION: UNMBER: US10/1409,138
CURRENT APPLICATION WUMBER: US10/1409,138
CURRENT FILING DATE: 2000-12-11
PRIOR PILING DATE: 2000-12-11
PRIOR PLING DATE: 1999-12-11
NUMBER OF SEQ ID NOS: 4641
SEQ ID NO 786
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Inducing Cellular Immune Responses to TITLE OF INVENTION: Inducing Cellular Immune Responses to TITLE OF INVENTION: HERZ/neu Using Peptide and Nucleic Acid Compositions FILE REFERENCE: 2060.0140001
CURRENT APPLICATION NUMBER: US/10/149,138
CURRENT FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: PCT/US00/33591
PRIOR APPLICATION NUMBER: US 09/458,299
PRIOR FILING DATE: 1999-12-11
NUMBER OF SEQ ID NOS: 4641
SOFTWARE: Patentin version 3.1
SEQ ID NO 2552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; OTHER INFORMATION: Artificially Synthesized Peptide
US-10-149-138-786
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
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ORGANISM: Artificial Sequence
                                                                              PUDLICALION.
GENERAL INFORMATION:
APPLICANT: Fixes, John
*"DETTCANT: Sette, Alessandro
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Sidney, John
                                                                                                                                                                         APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Southwood, Scott
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Matches 10; Conservative
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Best Local Similarity
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Sequence 620, Application US/10245871

Publication No. US2030235594A1

GENERAL INFORMATION:

APPLICANT: HUMFRENS', ROBERT

APPLICANT: XU, MINZHEN

TITLE OF INVENTION: 11-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES

FILE REPERBRUGE: REH-2013

CURRENT APPLICATION NUMBER: 10/10/245,871

CURRENT PILING DATE: 2003-01-09

PRIOR FILING DATE: 2003-01-09

PRIOR PLIING DATE: 1999-09-14

NUMBER OF SEQ ID NOS: 905

SOFTWARE: PATENTIN VALENCE: 1999-09-14

NUMBER OF SEQ ID NOS: 905

SEQ ID NO 620

LENGTH: 10

LENGTH: 10
                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Heiskala, Marja
APPLICANT: Peterson, Per
APPLICANT: Jackson, Michael
TITLE OP INVENTION: A CELL THERAPY METHOD FOR THE TREATMENT OF TUMORS
FILE REFERENCE: ORT-1557
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Query Match 100.0%; Score 51, DB 3; Length 10; Best Local Similarity 100.0%; Pred. No. 0.016; Matches 10; Conservative 0; Mismatches 0; Indels
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100.0%; Pred. No.
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CURRENT FILING DATE: 2002-02-19
NUMBER OF SEQ ID NOS: 42
SOFTWARE: Patentin version 3.1
SEQ ID NO 16
                                                                                                                                                                                                                                                                    Sequence 16, Application US/10080013 Publication No. US20030077248A1
                                                                                                                                                                                                                                                                                                                                     APPLICANT: Moriarty, Ann
APPLICANT: Leturcq, Didier
APPLICANT: Degraw, Juli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
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Best Local Similarity 100.
Matches 10; Conservative
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US-10-080-013-16
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; ORGANISM: Homo sapiens
US-10-245-871-620
                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION
                                                                                                                                                                                                                                          JS-10-080-013-16
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100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.016;

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ORGANISM: Artificial Sequence
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Best Local Similarity 100.
Matches 10; Conservative
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nes 10; Conservative
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Best Local S:
Matches 10
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APPLICANT: Sette, Alessandro
APPLICANT: Stdney, John
APPLICANT: Stdney, John
APPLICANT: Stdney, John
APPLICANT: Chesnut, Robert
APPLICANT: Cella, Refeban
APPLICANT: Readh, Ellssa
                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: Inducing Cellular Immune Responses to TITLE OF INVENTION: Inducing Cellular Immune Responses to TITLE OF INVENTION: HER2/neu Using Peptide and Nucleic Acid Compositions FILE REFERENCE: 2006.014.0001

CURRENT APPLICATION NUMBER: 2002-06-10

PRIOR APPLICATION NUMBER: PCT/US00/33591

PRIOR APPLICATION NUMBER: US 09/458,299

PRIOR FILING DATE: 1999-12-11

NUMBER OF SEQ ID NOS: 4641

SOFTWARE: Patentin version 3.1

SEQ ID NO 4335
    Gaps
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CURRENT APPLICATION NUMBER: US/10/149,138
CURRENT FILING DATE: 2002-06-10
PRIOR FILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 09/458,299
PRIOR FILING DATE: 1999-12-11
NUMBER OF SEQ ID NOS: 4641
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , OTHER INFORMATION: Artificial Peptide US-10-149-138-4335
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                                                                                                                                                                                              Sequence 4335, Application US/10149138; Publication No. US20040018971A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                 APPLICANT: Fikes, John
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
APPLICANT: Celis, Esteban
APPLICANT: Keogh, Elissa
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Organism: Artificial Sequence
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Best Local Similarity 100.
Matches 10; Conservative
    10; Conservative
                                                1 VMAGVGSPYV 10
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US-10-149-138-4422
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    Matches
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APPLICANT: Keogh, Elissa
TITLE OF INVENTION: Inducing Cellular Immune Responses to
TITLE OF INVENTION: HER2/neu Using Peptide and Nucleic Acid Compositions
TITLE TEFERENCE: 2060.0144001
CURRENT APPLICATION NUMBER: US/10/149,138
CURRENT FILING DATE: 2002-06-10
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TITLE OF INVENTION: I1-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES
FILE REPERENCE: REH-2015
CURRENT APPLICATION NUMBER: US/10/253,286
CURRENT FILING DATE: 2003-01-13
PRIOR PEPLICATION NUMBER: 10/197,000
PRIOR PILING DATE: 2002-07-17
PRIOR APPLICATION NUMBER: 09/396,813
PRIOR PILING DATE: 1999-09-14
NUMBER OF SEQ ID NOS: 905
SOFTWARE: PALENCIN VET: 2.1
SEQ ID NO 620
LENGTH: 10
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                                                                                            Length 10;
                                                                                                                                             0; Indels
                                                                                                                                                Mismatches
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PRIOR PILING DATE: 2000-12-11
PRIOR APPLICATION NUMBER: US 09/458,299
PRIOR PILING DATE: 1999-12-11
NUMBER OF SEQ ID NOS: 4641
SOFTWARE: PATENTIN VERBION 3.1
LENGTH: 10
; FEATURE:
; OTHER INFORMATION: Artificial Peptide
US-10-149-138-4422
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                                                                                                                                                                                                                                                                                                                                                                Sequence 4435, Application US/10149138
Publication No. US20040018971A1
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Publication No. US20040058881A1
GENERAL INFORMATION:
APPLICANT: HUMPHREYS, ROBERT
                                                                                               100.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Fikes, John
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Southwood, Scott
Chesnut, Robert
Celis, Esteban
Keogh, Elissa
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APPLICANT: Richards, John M.
TITLE OF INVENTION: A CELL THERAPY METHOD FOR THE TREATMENT OF TUMORS;
FILE REFERENCE: ORT 1342CIP
CURRENT PEPLICATION NUMBER: US/10/289,566
CURRENT FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: US 60/270,252
PRIOR FILING DATE: 2001-02-20
PRIOR FILING DATE: 2001-02-19
NUMBER OF SEQ ID NOS: 43
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin version 3.2
SEQ ID NO 16
LENTH: 10
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APPLICANT: KOSMATOPOULOS, Kostas
APPLICANT: TOURDOT, Sophie
APPLICANT: SCARDINO, Antonio
APPLICANT: SCARDINO, Antonio
APPLICANT: STANDINO, ANTONIO
APPLICANT: STANDINO, METHOD FOR SCREENING PEPTIDES FOR USE IN
ITILE OF INVENTION: IMPHOD FOR SCREENING PEPTIDES FOR USE IN
                                                                                                       Query Match

100.0%; Score 51; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 10; Conservative 0; Mismatches 0; Indels
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CURRENT APPLICATION NUMBER: US/10/333,430
CURRENT FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: FR 0009591
PRIOR FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 70
SOFTWARE: Patentin Ver. 2.1
LENGTH: 10
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; OTHER INFORMATION: Synthetic Construct
US-10-289-566-16
                                                                                                                                                                                                                                                                                                                                      RESULT 14
US-10-289-566-16
US-10-289-566-16
Squence 16, Application US/10289566
Publication No. US2004001671A1
GENERAL INFORMATION:
APPLICANT: Letureq, Didier J.
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Publication No. US20040072240A1
GENERAL INFORMATION:
APPLICANT: INSERM
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Jackson, Michael R.
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ORGANISM: Artificial Sequence
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/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-253-286-620
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; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic peptide
US-10-33-430-31

Query Match
US-10-33-430-31

Query Match
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps
Qy 1 VMAGVGSPYV 10

Qy 1 VMAGVGSPYV 10

Search completed: April 11, 2006, 19:39:07
JOb time: 167 secs
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Sequence 622, App
                                                                                                                                                                                                               April 11, 2006, 19:36:30 ; Search time 25 Seconds (without alignments) 12.477 Million cell updates/sec
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Sequence 3138,
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Sequence 10,
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1: /SIDS5/ptcdata/1/pubpaa/USO8 NEW PUB.pep:*

2: /SIDS5/ptcdata/1/pubpaa/USO6 NEW PUB.pep:*

3: /SIDS5/ptcdata/1/pubpaa/USO7 NEW PUB.pep:*

4: /SIDS5/ptcdata/1/pubpaa/PCT_NEW PUB.pep:*

5: /SIDS5/ptcdata/1/pubpaa/USO7 NEW PUB.pep:*

6: /SIDS5/ptcdata/1/pubpaa/US10_NEW PUB.pep:*

7: /SIDS5/ptcdata/1/pubpaa/US10_NEW PUB.pep:*

8: /SIDS5/ptcdata/1/pubpaa/US10_NEW PUB.pep:*
GenCore version 5.1.7
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-11-055-822-946
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-10-957-887B-251
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US-10-510-101-135
US-11-033-039-908
US-11-033-039-932
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Listing first 45 summaries
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1 VMAGVGSPYV 10
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Maximum DB seq length: 20000000
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56	34	66.7	462	7	US-11-082-389-412	Seguence	412, App
27	34	66.7	1433	_	US-11-094-519A-40	Sequence	40, Appl
28	33	64.7	112	٢	US-11-230-180-17	Sequence	
53	33	64.7	358	7	US-11-087-099-11741	Sequence	11741, 7
30	33	64.7	363	۲	US-11-087-099-2715	Sequence	2715, Ag
31	33	64.7	363	7	US-11-087-099-3776	Sequence	
32	33	64.7	363	۲	US-11-087-099-4337	Sequence	4337, Ap
33	33	64.7	491	7	US-11-098-686-10836	Sequence	10836, 7
34	33	64.7	748	7	US-11-096-568A-34369	Sequence	34369, 7
35	32	62.7	208	7	US-11-096-568A-22891	Sequence	22891, 7
36	32	62.7	237	7	US-11-096-568A-33599	Sequence	33599, 7
37	32	62.7	256	7	US-11-096-568A-22890	Sequence	22890, 7
38	32	62.7	284	۲	US-11-096-568A-33598	Sequence	33598, 7
39	32	62.7	313	7	US-11-087-099-257	Sequence	257, Apr
40	32	62.7	313	7	US-11-096-568A-33597	Sequence	33597, A
41	32	62.7	324	7	US-11-087-099-10913	Sequence	10913, A
42	32	62.7	324	۲	US-11-051-720-1349	Sequence	1349, AF
43	32	62.7	344	7	US-11-087-099-7157	Sequence	7157, Ap
44	32	62.7	362	7	US-11-087-099-1068	Sequence	1068, Ap
45	32	62.7	369	7	US-11-087-099-9241	Sequence	9241, Ap

ALIGNMENTS

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APPLICANT: NOWENELS, NOBELLA
APPLICANT: NOWENELS, NOBELLA
TITLE OF INVENTION: LI-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES
FILE REFERENCE: REH-20170801
CURRENT APPLICATION NUMBER: 10/245,871
PRIOR PILING DATE: 2002-09-17
PRIOR FILING DATE: 2002-09-17
SPRIOR FILING DATE: 1999-09-14
NUMBER OF SEQ ID NOS: 1452
SOFTWARE: Patentin version 3.3
SEQ ID NO 620
LENGTH: 10
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Publication No. U520060002947A1
GENERAL INFORMATION:
APPLICANT: HUMPHREYS, ROBERT
APPLICANT: HUMPHREYS, ROBERT
APPLICANT: XU, MINZHEN
TITLE OF INVENTION: LI-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES
FILE REPERBYCE: REH-2017US01
CURRENT APPLICATION NUMBER: US/11/033,039
CURRENT FILING DATE: 2005-01-11
PRIOR PILING DATE: 2002-09-17
PRIOR PLING DATE: 2002-09-17
PRIOR APPLICATION NUMBER: 10/197,000
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100.0%; Pred. No. 0.00065;
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                  Sequence 620, Application US/11033039
Publication No. US20060002947A1
GENERAL INFORMATION:
APPLICANT: HUMPHEXS, ROBERT
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Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-033-039-620
US-11-033-039-620
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Hefforn et al.

TITLE OF INVENTION: Tagged Epitope Protein Transposable Element
FILE REFERENCE: 61589
CURRENT APPLICATION NUMBER: US/10/968,629
CURRENT PILING DATE: 2004-10-18
PRIOR APPLICATION NUMBER: 09/979,338
PRIOR APPLICATION NUMBER: PCT/US00/14687
PRIOR PILING DATE: 2001-11-21
PRIOR PILING DATE: 2000-15-26
PRIOR PLICATION NUMBER: FCT/US00/14687
PRIOR PLILING DATE: 1999-05-26
NUMBER OF SEQ ID NOS: 33
SOFTHARE: PATENTING DATE: 1999-05-26
NUMBER OF SEQ ID NOS: 33
LENGTH: 82
                                                                                                                                                                                                                                                  OTHER INFORMATION: Description of Artificial Sequence: Synthetic OTHER INFORMATION: hybrid peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
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APPLICANT: Heffron et al.
TITLE OF INVENTION: Tagged Epitope Protein Transposable Element
FILE REPERENCE: 61589
CURRENT APPLICATION NUMBER: US/10/968,629
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100.0%; Score 51, DB 6; Length 82;
l Similarity 100.0%; Pred. No. 0.0063;
10; Conservative 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 51; DB 7; 100.0%; Pred. No. 0.0016;
PRIOR FILING DATE: 2002-07-17
PRIOR APPLICATION NUMBER: 09/396,813
NUMBER OF SEQ ID NOS: 1452
SOFTWARE: Patentin version 3.3
SEQ ID NO 622
LENGTH: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 27, Application US/10968629
Publication No. US20060040382A1
GENERAL INFORMATION:
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Publication No. US20060040382A1
                                                                                                                                                                                                 ORGANISM: Artificial Sequence FEATURE:
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Best Local Similarity 100.
Matches 10; Conservative
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; OTHER INFORMATION: Ava
US-11-033-039-622
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Best Local Similarity
Matches 10; Conserva
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APPLICANT: Brown, Eugene
APPLICANT: Liu, Wei
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING, PREVENTING, AND TREATI:
TITLE OF INVENTION: CANCERS
FILE REFERENCE: AM101079 (21896-010000)
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                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: Description of Artificial Sequence: Amino acid COTHER INFORMATION: resolved product using the construct shown in fig. 10THER INFORMATION: FIG 9.
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TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR MODULATING
TITLE OF INVENTION: A CYTOTOXIC T LYMPHOCYTE IMMUNE RESPONSE
FILE REPERENCE: DFN-043CN
CURRENT PILING DATE: 2004-12-22
PRIOR APPLICATION NUMBER: US/11/022,562
PRIOR PILING DATE: 2003-06-27
PRIOR PILING DATE: 2003-06-27
PRIOR APPLICATION NUMBER: 60/392718
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Pred. No. 0.0072;
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100.0%; Pred. No. v.
0; Mismatches
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100.0%; Pred. No. 0.
0; Mismatches
CURRENT FILING DATE: 2004-10-18
PRIOR APPLICATION WURBER: 09/979,338
PRIOR FILING DATE: 2001-11-21
PRIOR FILING DATE: 2000-11-21
PRIOR FILING DATE: 2000-05-26
PRIOR PLICATION NUMBER: 60/136,210
PRIOR PLILING DATE: 1999-05-26
NUMBER OF SEQ ID NOS: 33
SSQTWARE: PATENTIN Ver. 2.1
LENGTH: 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/770,726
CURRENT FILING DATE: 2004-02-04
NUMBER OF SEQ ID NOS: 48640
SOFWARE: Patentin version 3.2
SEQ ID NO 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 213, Application US/11022562
Publication No. US20050249742A1
GENERAL INFORMATION:
APPLICANT: Ruprecht, Ruth M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 62, Application US/10770726
Publication No. US20050266409A1
GENERAL INFORMATION:
APPLICANT: Wyeth
                                                                                                                                                                                                                                                   TYPE: PRT ORGANISM: Artificial Sequence
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Best Local Similarity 100.
Matches 10; Conservative
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Best Local Similarity 100.
Matches 10; Conservative
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US-10-770-726-62
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Sequence 9, Application US/11155288 Publication No. US20060008468A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Leach, Dana
Nielsen, Klaus
Karlsson, Gunilla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouritsen, Soren
Gautam, Anand
Dalum, Iben
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Best Local Similarity 100.
Matches 10, Conservative
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Leach, Dana
                                                                                                      Best Local Similarity 100 Matches 10; Conservative
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ORGANISM: Homo sapiene
US-11-155-288-9
                ; ORGANISM: Homo sapiens
US-11-033-039-553
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| Publication No. US2066002947A1
| GENERAL INFORMATION |
| APPLICANT: NUMERIES, ROBERT |
| APPLICANT: XU, MIXZHEN |
| TITLE OF INVENTION: LI-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES |
| TITLE OF INVENTION: LI-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES |
| TITLE OF INVENTION: LI-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES |
| CURRENT PELING DATE: 2005-01-11 |
| PRIOR APPLICATION NUMBER: 10/197,000 |
| PRIOR FILING DATE: 2002-09-17 |
| PRIOR FILING DATE: 2002-09-17 |
| PRIOR FILING DATE: 2002-09-14 |
| NUMBER OF SEQ ID NOS: 1452 |
| SOFTWARE: Patentin version 3.3
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US-11-113-202-10

Sequence 10, Application US/11113202

Publication No. US20050272637A1

GENERAL INFORMATION:

APPLICANT: Clinfon, Gail M.

APPLICANT: Shamieh, Lara

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: RECEPTOR AND ERBB RECEPTORS

FILE REPERBNCE: 49321-136

CURRENT APPLICATION NUMBER: US/11/113,202

CURRENT APPLICATION NUMBER: US 60/590,473

PRIOR FILING DATE: 2004-07-23

PRIOR FILING DATE: 2004-07-23

PRIOR FILING DATE: 2004-07-23

NUMBER OF SEQ.ID NOS: 24

SSOFTWARE: PATENTION PUMBER: 33

SEQ.ID NO 10

LENGTH: 1255
PRIOR FILING DATE: 2002-06-27
NUMBER OF SEQ ID NOS: 340
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 213
LENGTH: 1255
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US-11-113-202-10
                                                                                                                                                    ORGANISM: Homo sapiens
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Matches 10; Conserv
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APPLICANT: Chiang, Chih-Sheng
APPLICANT: Simand, John J.L.
TITLE OF INVENTION: COMBINATIONS OF TUMOR-ASSOCIATED
TITLE OF INVENTION: ANTIGENS IN DIAGNOSTICS FOR VARIOUS TYPES OF CANCERS
FILE REFERENCE: MANNK. 050A
CURRENT APPLICATION NUMBER: 05/11/155, 288
CURRENT PILING DATE: 2005-06-17
PRIOR PILING DATE: 2004-06-17
PRIOR PILING DATE: 2004-06-17
NUMBER OF SEQ ID NOS: 40
SOFTWARE: FRABERQ for Windows Version 4.0
SEQ ID NO 9
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  DB 7; Length 1255; 0.12;
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TITLE OF INVENTION: Novel Methods for Therapeutic Vaccination
FILE REFERENCE: 4614-0107PUS2
                                                     0; Indels
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CURRENT PILING DATE: 2005-08-11
PRIOR APPLICATION NUMBER: US 09/806,703
PRIOR PLING DATE: 2001-04-04
PRIOR PLING DATE: 1999-10-05
PRIOR PLING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: DK 1998 01261
PRIOR APPLICATION NUMBER: US 00/105,011
PRIOR PILING DATE: 1998-10-05
PRIOR PILING DATE: 1998-10-05
PRIOR PILING DATE: 1998-10-05
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100.0%; Score 51; 100.0%; Pred. No.
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Query Match
Best Local Similarity 88.9
Matches 8; Conservative
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Best Local Similarity
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Publication No. US20060002947A1

GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: HUMPHREYS, ROBERT

APPLICANT: HUMPHREYS, ROBERT

APPLICANT: KU, MINZHEN

TITLE OF INVENTION: LI-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES

PILE REFERENCE: REH-2017U801

CURRENT APPLICATION NUMBER: 10/245,871

PRIOR PELING DATE: 2002-01-7

PRIOR PELING DATE: 2002-01-7

PRIOR PEPLICATION NUMBER: 10/295,000

PRIOR PEPLICATION NUMBER: 09/396,813

PRIOR PELING DATE: 2002-07-17

PRIOR PELING DATE: 1002-07-17

PRIOR PELING DATE: 1002-07-17

PRIOR FILING DATE: 100-01-7

PRIOR PELING DATE: 100-01-7

PRIOR PELING DATE: 2002-07-17

PRIOR PELING DATE: 2002-07-17

PRIOR PELING DATE: 2002-07-17

PRIOR PELING DATE: 100-01-7

PRIOR PELING DATE: 2002-07-17

PRIOR PELING DATE: 2002-07-17
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                                                                                                   100.0%; Score 51; DB 7; Length 1255; 100.0%; Pred. No. 0.12;
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APPLICANT: MONAHAN, JOHN J.
APPLICANT: LANGTON, BEATRICE CLAUDIA
APPLICANT: HANCOCK, MIRIAM E.C.
APPLICANT: CHAO, LORINIB A.
TITLE OF INVENTION: C-ERBB-2 EXTERNAL DOMAIN: GP75
FILE REFERENCE: BBBIO-111-C1
CURRENT APPLICATION NUMBER: US/11/175,405
CURRENT FILICATION DATE: 2005-07-07
NUMBER OF SEQ ID NOS: 2
SOFFWARE: Patentin Ver. 2.1
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100.0%; Pred. No.
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Publication No. US20060019344A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: STUART, SUSAN G.
                                                                                                                                  Best Local Similarity 100.
Matches 10; Conservative
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Matches 10; Conservative
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; ORGANISM: Homo Bapiens
US-11-175-405-2
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ORGANISM: Homo sapiens
US-11-033-039-930
                         ; ORGANISM: Homo sapiens
US-11-202-516-4
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LENGTH: 1255
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TYPE: PRT
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RESULT 13 095-91

RESULT 14 055-91

RESULT 15 091-91

RESULT 15 091-91

RESULT 15 091-91

RESULT 15 091-91

RESULT 14 09
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US-11-033-039-908
Sequence 908, Application US/11033039
Sequence 908, Application US/11033039
Publication No. US2006002947A1
SEMERAL INFORMATION:
APPLICANT: HUMPHREYS.
FILE OF INVENTON: LI-KEY/ANTIGENIC BPITOPE HYBRID PEPTIDE VACCINES
FILE REFERENCE: REH-2017US01
CURRENT APPLICATION NUMBER: US/11/033,039
CURRENT APPLICATION NUMBER: 10/245,871
PRIOR FILING DATE: 2002-09-17
PRIOR FILING DATE: 2002-09-17
PRIOR PELING DATE: 2002-07-17
PRIOR APPLICATION NUMBER: 09/396,813
PRIOR PELING DATE: 1999-09-14
NUMBER OF SEQ. ID NOS: 1452
SEQ. ID NO 908
SEQ. ID NO 908
SEQ. ID NO 908
SEG. I
           0; Gaps
1; Indels
     0; Mismatches
     8; Conservative
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Best Local Similarity 100.
Matches 7; Conservative
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CORGANISM: Homo sapiens
US-11-033-039-908
                                                                                                                 1 VMAGVGSPY 9
                                                                                                                                                                                                                      1 VMDGVGSPY 9
Matches
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Search completed: April 11, 2006, 19:39:38 Job time : 26 secs

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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
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- protein search, using sw model OM protein

Run on:

April 11, 2006, 19:31:00 ; Search time 38 Seconds (without alignments) 25.320 Million cell updates/sec .

US-09-277-064-12 Perfect score: ritle:

1 VMAGVGSPYV 10 Sequence:

Gapop 10.0 , Gapext 0.5 **BLOSUM62** Scoring table:

Total number of hits satisfying chosen parameters:

283416 segs, 96216763 residues

Searched:

length: 0 length: 200000000 Minimum DB seq Maximum DB seq

Minimum Match 0% Maximum Match 100% Listing first 45 summaries Post-processing:

Database

PIR 80:*
1: pir1:*
2: pir2:*
3: pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

protein-tyrosine k protein-tyrosine k SITS-binding prote uridylate kinase [UMP kinase (EC 2.7 hypothetical prote 2-dehydro-3-deoxyhypothetical prote permease protein o hypothetical prote cell division prot hypothetical prote isoleucyl-tRNA syn isoleucyl-tRNA syn enhancer of split hypothetical prot sodium/phosphate JL34 protein hypothetical hypothetical hypothetical Description SUMMARIES 109037 B95109 E97977 F70780 G90450 D83679 T35138 WMBEH4 S65829 B48189 AD3358 876153 AI1966 Length DB Query 722.57722.57722.57722.57722.57722.57722.57722.5722.5722.5722.5722.5722.5722.5722.5722.5722.5722.5722.5722.5722.5722.5722.5722.57222.57222.57222.5 689. Score Result

celB protein - Agradenylate cyclase celB protein [impo cellulose synthase uridylate kinase [probable autoantig membrane protein [conserved hypothet probable PPE prote hypothetical prote hypothetical prote hypothetical prote	2',3'-cyclic-nucle isoleucine-tRNA li tumor suppressor -
139713 574929 B96320 B96320 B86899 B72623 B95099 A70663 A01697 C97507	AG2725 AH0058 IS1669
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698 827 8827 240 240 307 391 4434 662	662 938 1427
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protein-tyrosine kinase (EC 2.7.1.112) erbB2 precursor - human N;Alternate names: c-erb-B-2 protein precursor; kinase-related transforming protein C;Species: Homo sapiens (man)

er

C)Date: 25-Oct-1987 Heaquemee revision 06-Dec-1996 #text change 05-Oct-2004
C;Accession: A24571; A25491; A44188; B44188; I59509; I57522
C;Accession: A24571; A25491; A44188; B44188; I59509; I57622
Isyanamoto, T.; Iskaw, S.; Akiyama, T.; Semba, K.; Nomura, N.; Miyajima, N.; Saito, T. Nature 319, 230-234, 1986
A;Title: Similarity of protein encoded by the human c-erb-B-2 gene to epidermal growth A;Reference number: A24571; MUID:86118663; PMID:3003577,

Accession: A24571

A; Molecule type: mRNA
A; Readdues: 1.155 < VRAMA
A; Readdues: 1.155 < VRAMA
A; Readdues: 1.155 < VRAMA
A; Readdues: U.155 < VRAMA
C; Risemba, K.; Kamata, N.; Toyoshima, K.; Yamamoto, T.
Proc. Natl. Acad Sci. U.S.A. 82, 6497-6501, 1985
A; Ritle: A v-exbB-related protoconcogene, c-exbB-2, is distinct from the c-exbB-1/epide
A; Reference number: A25491; MUID:86016729; PMID:2995967

A;Accession: A25491
A;Molecule type: DNA
A;Residues: 737-1031 <SEM>A;Coss-references: UNIPARC:UPI000016A8A7; GB:M11767; NID:g182163; PIDN:AAA35808.1; PI.
R;Coussens, L.; Yang-Peng, T.L.; Liao, Y.C.; Chen, B.; Gray, A.; McGrath, J.; Seeburg, Science 230, 1132-1139, 1985

A;Title: Tyrosine kinase receptor with extensive homology to EGF receptor shares chrom: A;Reference number: A44188; MUID:86070181; PMID:2999974
A;Accession: A44188

A;Molecule type: DNA A;Residuse: 740-910 «COUI». A;Crose-references: UNIPARC:UP1000016AA26; GB:M12036; NID:g183988; PIDN:AAA35978.1; PII A;Accession: B44188

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A; Residues: 1, E21, MaLL, 522, S', 524-654, V', 656-1169, A', 1171-1255 <COU2>
A; Cross-references: UNIPARC: UP100001725C7; GB:M11730; NID: 9183986
R; King, C.R.; Kraus, M.H.; Aaronson, S.A.
Science 229, 974-976, 1985
A; Title: Amplification of a novel v-erbB-related gene in a human mammary carcinoma. A; Reference number: 159509; MUID: 85272597; PMID: 2992089

A;Status: translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Molecule type: DNA A;Rossedues: 832-909 <REX> A;Cross-references: UNIPARC:UPI0000070A3F; GB:L29395; NID:9459807; PIDN:AAA35809.1; PII R;Tal, M.; King, C.R.; Kraus, M.H.; Ullrich, A.; Schlessinger, J.; Givol, D. A)Title: Human HER2 (neu) promoter: evidence for multiple mechanisms for transcription: A;Reference number: 157622; MUID:87286898; PMID:3039351

A;Status: translated from GB/EMBL/DDBJ A;Molecule type: DNA A;Residues: 1-191 <TAL> Accession: 157622

transforming prote probable RNA-direc probable RNA-direc

wo component sens

AD2583 B97365

IMP dehydrogenase IMP dehydrogenase

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F;882,1227,1253/Binding site: phosphate (Tyr) (covalent) #status predicted
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Matches 9; Conservative
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A; Residues: 1-1260 «BAR»
A; Residues: 1-1260 «BAR»
A; Cross-references: UNIPROT: P06494; UNIPARC: UPI0000161B83; EMBL: X03362; NID: 956745; PIDN
B; Meastrogenesis: 17.; Mann, A.M.; Macatee, T.L.; Garland, E.M.; Okamura, T.; Smith, R.A.; Cohen,
Carcinogenesis: 12, 1975-1978, 1991
A; Title: Direct DNA sequencing of the rat new oncogene transmembrane domain reveals no m
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Description: catalyzes the phosphorylation of a peptidyl tyrosine residue by ATP C; Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology C; Keywords: ATP; autophosphorylation; duplication; glycoprotein; phosphoprotein; phospho
          A,Cross-references: UNIPARC:UP1000000427; GB:M16792; NID:g183983; PIDN:AAAS8637.1; PID:
C,Comment: Amplification and overexpression of this erbB-related gene occurs in about 3d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         F;68,124,187,259,530,571,629/Binding site: carbohydrate (Asn) (covalent) #status predict F;686/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicted F;753/Active site: Lys #status predicted F;1139,1221,1222,1248/Binding site: phosphate (Tyr) (covalent) (by autophosphorylation)
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F;713-988/Domain: protein kinase ATP-binding motif
F;711-739/Region: protein kinase ATP-binding motif
F;711-739/Region: protein kinase ATP-binding motif
F;711-739/Region: protein kinase ATP-binding motif
F;758/Active site: phosphate (Thr) (covalent) #status predicted
F;758/Active site: Lys #status predicted
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein-tyrosine kinase (BC 2.7.1.112) neu precursor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 31-Dec-1988 #sequence_revision 31-Dec-1988 #text_change 05-Oct-2004
C;Accession: A24562; A61204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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1.22-1255/Product: protein-tyrosine kinase erbB2 #status predicted <MAT>
1.22-33/Domain: extracellular #status predicted <EXT>
1.20-33/Domain: EGF receptor extracellular domain repeat <EE1>
1.395-605/Domain: EGF receptor extracellular domain repeat <EE2>
1.365-605/Domain: transmembrane #status predicted <TMM>
1.305-605/Domain: transmembrane <TMM>
1.305-605/Domain: transmembrane #status predicted <TMM>
1.305-605/Domain: transmembrane <TMM>
1.305-605/Domain: transmem
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Cross-references: UNIPARC:UP100001725C8
Note: authors translated the codon GCA for residue 25 as Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ,676-1255/Domain: intracellular #status predicted <INT>,718-983/Domain: protein kinase homology <KIN>,726-734/Region: protein kinase ATP-binding motif
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Reference number: A61204; MUID:92035293; PMID:1682063
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Nature 319, 226-230, 1986
                                                                                                                                                                                                                  A;Cross-references: GDB:120613; OMIM:164870
A;Map position: 17921.1.17942.1
A;Introns: 25/1; 75/3; 147/1; 883/3
A;Note: the list of introns is incomplete
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C, Accession: T09037
R. Bevan, M.; Lennard, N.; Quail, M.; Harris, B.; Rajandream, M.A.; Barrell, B.G.; Banc submitted to the Protein Sequence Database, June 1999
A. Reference number: Z16533
A. Accession: T09037
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A;Cross-references: UNIPROT:Q9MOIG; UNIPARC:UPI000009E5E1; EMBL:AL049803; GSPDB:GN0006
A;Experimental source: cultivar Columbia; BAC clone F26K10
                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Nakamura, T.; Ushijima, T.; Ishizaka, Y.; Nagao, M.; Arai, M.; Yamazaki, Y.; Ishikaw Gene 140, 251-255, 1994
A;Title: Cloning and activation of the Syrian hamster neu proto-oncogene.
A;Reference number: 148161; MUID:94193007; PMID:7908275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,Residues: 1-1254 <RES>
A,Cross-references: UNIPROT:Q60553; UNIPARC:UPI000012A111; GB:D16295; NID:g493236; PID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Superfamily: Tyrosine-protein kinase, EGF receptor type; protein kinase homology
C;Keywords: ATP
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                                                                                                                                                                                                                                                                                                                                                            C.Species: Mesocricetus auratus (golden hamster)
C.Species: Mesocricetus auratus (golden hamster)
C.Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 05-Oct-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;Date: 11-Jun-1999 #sequence_revision 11-Jun-1999 #text_change 09-Jul-2004
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C;Superfamily: Arabidopsis thaliana hypothetical protein P26K10.90
   DB 1; Length 1260
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    Arabidopsis thaliana

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Pred. No. 0.82;
1; Mismatches (
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Pred. No. 12;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Accession: 148161
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  P,718-983/Domain: protein kinase homology <KIN>F,726-734/Region: protein kinase ATP-binding motif
                            0.22;
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                                                              0; Mismatches
100.0%; Score 51; 100.0%; Pred. No.
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Gaps

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Indels

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on, J.D.; Umayam, L.A.; White, O.; Salzberg, S.L.; Lewis, M.R.; Radune, D.; Holtzapple nson, T.; Hickey, B.K.; Holt, I.B. Science 293, 498-506, 2001
Science 293, 498-506, 2001
A;Authors: Loftus, B.J.; Yang, F.; Smith, H.O.; Venter, J.C.; Dougherty, B.A.; Morrisc A;Reference number: A95000, MUD:21357209; PMID:11463916
A;Accession: B95109
A;Status: president type: DNA
A;Residues: 1-247 <KUR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R.Hoskins, J.A.; Alborn Jr., W.; Arnold, J.; Blassczak, L.; Burgett, S.; DeHofff, B.S.; e, R.; LeBlanc, D.J.; Lee, L.N.; Lefkowitz, E.J.; Lu, J.; Matsushima, P.; McAhren, S.; Y. P.; Sun, P.M.; Winkler, M.E.
J. Bacteriol. 183; 5709-5717, 2001
A; Authors: Yang, Y.; Young-Bellido, M.; Zhao, G.; Zook, C.; Baltz, R.H.; Jaskunas, S.R. A; Title: Genome of the Bacterium Streptococcus pneumoniae Strain R6.
A; Reference number: A97872; MUID:21429245; PMID:11544234
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A;Auchors: Sqares, R.; Sulston, J.B.; Taylor, K.; Whitehead, S.; Barrell, B.G. A;Atchering the biology of Mycobacterium tuberculosis from the complete genom A;Reference number: A70500; MUID:98295987; PMID:9634230
                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: UNIPROT:Q97R83; UNIPARC:UPI0000051655; GB:AE005672; PIDN:AAK75067.
A;Experimental source: strain TIGR4
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cross-references: UNIPROT: Q8DQ50, UNIPARC: UP100000E3531; GB: AE007317; PIDN: AAK99649
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Species: Streptococcus pneumoniae
Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change 09-Jul-2004
Accession: B97977
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C;Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UMP kinase (BC 2.7.4.-) [imported] - Streptococcus pneumoniae (strain R6)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            hypothetical protein Rv0881 - Mycobacterium tuberculosis (strain H37RV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 37; DB 2; Length 247; Pred. No. 20;
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1; Mismatches
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Matches 6; Conservative
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|135 AGIGSPY 141
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AGIGSPY 141
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Molecule type: DNA
Residues: 1-247 <KUR>
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Matches
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cell division protein Fts2 - Methanobacterium thermoautotrophicum (strain Delta H)
C;Species: Methanobacterium thermoautotrophicum
C;Species: Methanobacterium thermoautotrophicum
C;Date: OS-Dec-1997 #sequence_revision 05-Dec-1997 #text_change 09-Jul-2004
C;Accession: A69091
R;Smith, D.R.; Doucette-Stamm, L.A.; Deloughery, C.; Lee, H.; Dubois, J.; Aldredge, T.; i, Qiu, D.; Spadafora, R.; Vicaire, R.; Wang, Y.; Wierzbowski, J.; Gibson, R.; Jiwani, N. K.; S.; Church, G.M.; Daniels, C.J.; Mao, J.; Rice, P.; Noelling, J.; Reeve, J.N.
J. Bacteriol. 179, 7135-7155, 1997
A;Title: Complete genome sequence of Methanobacterium thermoautotrophicum Delta H: funct
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C;Species: Streptococcus pneumoniae
C;Date: 03-Aug-2001 #sequence_revision 03-Aug-2001 #text_change 09-Jul-2004
C;Accession: B91109
R;Tettelin, H.; Nelson, K.E.; Paulsen, I.T.; Eisen, J.A.; Read, T.D.; Peterson, S.; Heid
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H
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A;Reference number: S04987; MUID:89374082; PMID:2775201
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A;Residues: 1-697 <JEN1>
A;Cross-references: UNIPROT:P19965; UNIPARC:UP100001714BC; EMBL:X16078; NID:g64403; PIDN
A;Accession: S30070
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A.Residues: 2-11;435-49, X', 451-452, X', 454-459;634-649 <JEN2>
A.Residues: 2-11;435-49, X', 451-452, X', 454-459;634-649 <JEN2>
A.Cross-references: UNIPARC:UDIO000174107; UNIPARC:UDIO000174108; UNIPARC:UDIO000174109
C;Superfamily: SITS-binding protein spl05
C;Reywords: disulfide bond; glycoprotein; homodimer; transmembrane protein #status experimental <MAT>
C;2-697/Product: SITS-binding protein #status predicted <TMA1>
F;30-507/Domain: transmembrane #status predicted <TMA2>
F;503-521/Domain: transmembrane #status predicted <TMA2>
F;503-521/Domain: transmembrane #status predicted <TMA2>
F;542-562/Domain: transmembrane #status predicted <TMA3>
F
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A,Status: preliminary; nucleic acid sequence not shown; translation not shown A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-381 <MTH>
A;Cross-references: UNIPROT:027712; UNIPARC:UP1000012AD23; GB:AE000925; GB:AE6AA;Experimental source: strain Delta H
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304987
STG-binding protein spl05 - Pacific electric ray)
C;Species: Torpedo californica (Pacific electric ray)
C;Species: Torpedo californica (Pacific electric ray)
C;Deces 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C;Decession: S04987; S30507
C;Accession: S04987; S30507
R;Jentsch, T.J.; Garcia, A.M.; Lodish, H.F.
Biochem. J. 261, 155-166, 1989
A;Title: Primary structor of a novel 4-accetamido-4'-isothiocyanostilbene-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
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A,Start codon: TTG
C,Superfamily: cell division protein ftsZ
F;133-139/Region: tubulin/FtsZ GTP/GDP-binding (G-G-G-T-G-[ST]-G)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 381
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100.0%; Pred. No. 30,
... 0; Mismatches
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Pred. No. 20;
2; Mismatches
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Best Local Similarity 100.7
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Best Local Similarity 70.0
Matches 7; Conservative
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A;Cross-references: UNIPROT:Q01068; UNIPARC:UPI000000118F; EMBL:M96165; NID:g158490; F
A;Note: sequence extracted from NCBI backbone (NCBIP:114183)
R;Knust, E.; Schrons, H.; Grawe, F.; Campos-Ortega, J.A.
Genetics 132, 505-518, 1992
A;Title: Seven genes of the Enhancer of split complex of Drosophila melanogaster encod A;Reference number: A38980; MUID:93051287; PMID:1427040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Residues: 1-149,151-173,'SRR',177-178,180-224 <KNU>
A;Cross-references: UNIPARC:UPI000016BC2C; EMBL:X67046; NID:g8073; PIDN:CAA47431.1; PI
A;Experimental source: strain Oregon R
                                                                                                                                                                                                                                                                                                                               A; Cross-references: UNIPROT:050486; UNIPARC:UPI00000DAB8E; EMBL:AL020958; PIDN:CAA1587
A; Experimental source: strain A3(2)
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C;Date: 31-Dec-1989 #sequence_revision 31-Dec-1989 #text_change 09-Jul-2004
C;Accession: G30085
R;McGeoch, D.J.; Dalrymple, M.A.; Davison, A.J.; Dolan, A.; Frame, M.C.; McNab, D.; Pe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        enhancer of split locus protein m3 - fruit fly (Drosophila melanogaster)
NyAlternate names: E(Spl)-HLM-m3; helix-loop-helix protein m3
C;Species: Drosophila melanogaster
C;Date: 21-Sep-1993 #sequence revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: D46177; D38980; <u>5</u>27814; 828449
R;Delidakis, C; Artavanis-Tsakonas, S.
Proc. Natl. Acad. Sci. U.S.A. 89, 8731-8735, 1992
A;Title: The Enhancer of split [E(spl)] locus of Drosophila encodes seven independent A;Reference number: A46177; MUID:92409590; PMID:1528887
                                                                                            05-Nov-1999 #sequence_revision 05-Nov-1999 #text_change 09-Jul-2004
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                                              Nypothetical protein SC4H8.07c SC4H8.07c - Streptomyces coelicolor
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                                                                                                                     C;Accession: T35138
C;Accession: T35138
R;Harris, D.; Parkhill, J.; Barrell, B.G.; Rajandream, abubmitted to the EMBL Data Library, December 1997
A;Accession: T35138
A;Accession: T35138
A;Accuse: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DMA
A;Molecule 1-66 < HAR>
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Pred. No. 28;
1; Mismatches
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7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 36;
Pred. No.
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Best Local Similarity 87.5%;
Matches 7; Conservative
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ilarity 75.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
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tes 6; Conserv
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A;Molecule type: mRNA
A;Residues: 1-224 <DEL>
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C;Species: Bacillus halodurans
C;Species: Bacillus halodurans
C;Date: 01-Dec-2000 #sequence_revision 01-Dec-2000 #text_change 09-Jul-2004
C;Accession: D38.70
R;Takami, H.; Nakasone, K.; Takaki, Y.; Maeno, G.; Sasaki, R.; Maeui, N.; Fuji, F.; Hira
Nucleic Acids Res. 28, 4317-4331, 2000
A;Title: Complete genome sequence of the alkaliphilic bacterium Bacillus halodurans and
A;Reference number: A83650; MUID:20512582; PMID:11058132
A;Accession: D83679
A;Accession: D83679
A;Accession: D83679
A;Accession: D83679
A;Accession: C-125
C;Genetics:
A;Experimental source: strain C-125
C;Genetics:
A;Genetics:
A;Genetics:
A;Residues: 1-288 <COL>
A;Cross-references: UNIPROT:Q10543; UNIPARC:UPI0000139DAD; GB:Z73101; GB:AL123456; NID:g
A;Experimental source: strain H37Rv
C;Genetics:
A;Gene: Rv0881
C;Superfamily: conserved hypothetical protein H10860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Cross-references: UNIPROT:Q97V83; UNIPARC:UPI00006483D; GB:AE006641; NID:g13816083; C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cispecies: Sulfolobus solfataricus
Cidate: 24-May-2001 #sequence_revision 24-May-2001 #text_change 09-Jul-2004
CiAccession: G90450
Rishe, O.; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; Char
Jong, I.; Jeffrises, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder,
arrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J.
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G90450
hypothetical protein SSO2752 [imported] - Sulfolobus solfataricus
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                                                                                                                                                                                 Score 37; DB 2; Length 288; Pred. No. 23; 2; Mismatches 0; Indels
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Pred. No. 31;
2; Mismatches
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60.0%;
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Best Local Similarity 75.0
Matches 6; Conservative
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16 IKGGVGTPYV 25
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A, Accession: G90450
A, Status: preliminary
                                                                                                                                                                                                                                                                                                                       83 LAGVGAPY 90
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Best Local Similarity
Matches 6; Conserv
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A; Residues: 1-388 < KUR>
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J. Gen. virol. 69, 1531-1574, 1988
A;Title: The complete DNA sequence of the long unique region in the genome of herpes sim A;Fitle: The complete DNA sequence of the long unique region in the genome of herpes sim A;Reference number: A30083; MUID:88274327; PMID:2839594
A;Accession: G30085
A;Accession: nucleic acid sequence not shown; translation not shown
A;Residues: 1-275 cMCG>
A;Coss-references: UNIPROT:P10218; UNIPARC:UP10000137B9E; GB:X14112; NID:g1944536; PIDN C;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
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ô 0; Gaps Score 36; DB 1; Length 275; Pred. No. 34; 1; Mismatches 1; Indels Query Match
Best Local Similarity 75.0
Matches 6; Conservative

2 MAGVGSPY 9

hypothetical protein 3 - beet mild yellowing virus

Species: beet mild yellowing virus Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 31-Oct-1997 Accession: S65829

Riguilley, H.; Richards, K.E.; Jonard, G. Arch. Virol. 140, 1109-1118, 1995 A;Ttle: Nucleotide sequence of beet mild yellowing virus RNA-A;Reference number: S65825; MUID:95336315; PMID:7611881 A;Reference: S65829

A,Molecule type: genomic RNA
A,Residues: 1-625 <GUI>
A,Crose-references: UNIDARC:UPI00001757FF; EMBL:X83110
A,Experimental source: isolate 2ITB
A,Note: this reading frame extends between two stop codons and does not begin with a sta C,Superfamily: potato leaf roll virus RNA-directed RNA polymerase

Gaps Score 36; DB 2; Length 625; Pred. No. 77; 0; Mismatches 1; Indels 1; Indels Query Match
Best Local Similarity 87.5%;
Matches 7; Conservative

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3 AGVGSPYV 10

273 AGVGVPYV 280 셤 Search completed: April 11, 2006, 19:35:24 Job time : 40 secs

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304 AA; 33934 MW; 47C0290F4BC020ED CRC64;
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Q68KJ7_FE
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                                                                                                                                        April 11, 2006, 19:27:40; Search time 230 Seconds (without alignments) 30.675 Million cell updates/sec
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Copyright (c) 1993 - 2006 Biocceleration Ltd
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ARBB2_CANPA

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Q6ZPEO_MOUSE

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"Y47_BRARE

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08LIFE_ARATH

0523R8 MAGATH

0523R8 MAGATH

04NWC7 9MICC

08WU13_CCTPA

08DSY1_STRWD

09WWAZ_SYNP6

050WZZ_SYNP6

050WZ_SYNP6

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Q4H1F2 HUMAN
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Listing first 45 summaries
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1: uniprot_sprot:*
2: uniprot_trembl:*
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De Maria R., Olivero M., Iussich S., Nakaichi M., Murata T.,
Biolatti B., Di Renzo M.P.; Carcinoma Is a Model of HER2
Corcarpressing Poor Prognosis Human Breast Cancer.";
Cancer Res. 65:907-912(2005).
EMBL; Ax665128; Ax001910.1; -; Genomic_DNA.
SWR; Q68KJ7; 57-04.
CO; GO:0006747; F:ATP binding; IEA.
CO; GO:0004713; F:protein extine/threonine kinase activity; IEA.
CO; GO:0004713; F:protein-tyrosine kinase.
InterPro; IPR001290; Ser_thr_pkinase.
InterPro; IPR001290; Ser_thr_pkinase.
InterPro; IPR00109; TYKINASE.
CO; CO:00001; Prot Kinase; I.
SWART; SM00219; TYRK: II.
SWART; SM00219; TYRK: II.
SWART; SM00219; TYRK: II.
SWART; SM00219; TYRK: II.
SWART; SM00109; PROTEIN KINASE DOM; I.
ROSITE; PS00101; PROTEIN KINASE DOM; I.
NA ATP-binding; Kinase; Nucleotide-binding; Transferase.
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Pelis silvestris catus (Cat).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Pelinae, Pelis.
NCBI_TaxID=9685,
Q86431
QSm141
QSm241
QSm250
Q47783
Q97783
Q80450
Q80405
Q8105
Q810
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25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               304 AA
                             OSM141_STRT1
OSMSNO_STRT2
Q4NGD9_9MICC
PYRH_STRPN
PYRH_STRR6
Y881_MYCTU
Y905_MYCBO
Q8PX83_MRTWA
Q8PX83_METWA
Q8TN86_METAC
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070456 SYN.
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        NUCLEOTIDE SEQUENCE.
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Gaps

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100.0%; Score 51; DB 2; Length 304; 100.0%; Pred. No. 0.33; Artive 0; Mismatches 0; Indels

us-09-277-064-12.rup

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Tanai H., Watanabe S., Ishida S., Ono Y., Hotuta T., Watanabe M.,
Sugiyama T., Irie R., Otsuki T., Sato H., Ota T., Wakanatsu A.,
Ishii S., Yamamoto J., Isono Y., Kawai-Hio Y., Saito K., Nishikwa T.,
Kimura K., Matsuo K., Nakamura Y., Sekine M., Kikuchi H., Kanda K.,
Wagatsuma M., Takahashi-Fujii A., Oshima A., Sugiyama A., Kawakami B.,
Suzuki Y., Sugano S., Nagahari K., Masuho Y., Nagai K., Isogai T.,
Submitted (MAR-2004) to the EMBL/GenBank/DDBJ databases.
EMBL, AKI31568; BADI8701.1; -; mRNA.
                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Euarchontoglires, Primates, Catarrhini, Hominidae,
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01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Mus musculus 13 days embryo male testis cDNA, RIKEN full-length
enriched library, clone: 6030449F08 product:v-erb-b2 erythroblastic
leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene
homolog (avian), full insert sequence. (Fragment)
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R GON, GO.0005524; F.ATP binding; IEA.

GO; GO.0005506; F.E.PECTON transporter activity; IEA.

R GO; GO.0004674; F.ETON ton binding; IEA.

R GO; GO.00046713; F.ETON ton binding; IEA.

R GO; GO.0004713; F.ETON ton binding; IEA.

R GO; GO.0004713; F.ETON ton activity; IEA.

R GO; GO.0004713; F.ETON ton activity; IEA.

R GO; GO.0004713; F.ETON ton activity; IEA.

R GO; GO.0006418; P.ETON tinase.

INTERPRO; IER00129; P.T. Dkinase.

R INTERPRO; IER00129; P.T. Dkinase.

R RNART; SM0020; S.TKC; I.

R SWART; SM0020; S.TKC; I.

R SWART; SM00109; PROTEIN KINASE ATP; I.

R ROSITE; PS00107; PROTEIN KINASE DOM; I.

R RNOSITE; PS00107; RROTEIN KINASE TYR; I.

R KINASE; RANGED TYROSIN KINASE TON ACTIVE; RANGER ATP; I.

R KINASE; RANGER TYRY; I.
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Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
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Pred. No. 0.46;
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                                                                           05-JUL-2004 (TrEMBLrel. 27, Last sequence update) 05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
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                  PRT;
                                                          Created)
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                                                                                                                Hypothetical protein FLJ16821.
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100.0%;
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                                                      05-JUL-2004 (TrEMBLrel. 27,
              Q6ZMM4 HUMAN PRELIMINARY;
Q6ZMM4;
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Q8COE7;
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                                                                                                                                       Homo sapiens (Human).
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                                                                                                                                                                                                                NCBI_TaxID=9606;
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DT 01-M
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STRAIN=C57BL/6J; IISSUE=Testis; MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100; MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100; Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M., Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.; Muramatsu M., Hayashizaki Y.; Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA lbraries for rapid discovery of new genes."; Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs."; Nature 420:563-573(2002).
Mammalia; Butheria; Buarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Mus.
                                                                              STRAIN=C57BL/6J; TISSUB=Testis; MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9; Carninci P., Hayashizaki Y.; Hiqshizaki Y.; Hiqshiqaki Y.; Hiqshiqancy full-length cDNA cloning."; Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN=C59BL/6J; TISSUE=Testis;
Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W.,
Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,
Hori P., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE-20530913; PubMed=11076861; DOI=10.1101/gr.152600; MEDLINE-20530913; PubMed=11076861; DOI=10.1101/gr.152600; Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watshiki M., Ohora Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., Rikiki integrated sequence analysis (RISA) system-384-format
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequencing pipeline with 384 multicapillary sequencer.";
Genome Res. 10:1757-1771(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=C57BL/6J; TISSUE=Testis; The PANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nature 409:685-690(2001).
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                                                                NUCLEOTIDE SEQUENCE
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                  Muroidea; Muridae
NCBI_TaxID=10090;
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P04626; Q14256; Q6LDV1; Q9UMK4;
13-AUG-1987 (Rel. 05, Created)
13-AUG-1987 (Rel. 05, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
Receptor tyrosine-protein kinase erbB-2 precursor (EC 2.7.1.112)
RpserbB2) (C-erbB-2) (NEU proto-oncogene) (Tyrosine kinase-type cell surface receptor HER2) (MLN 19)
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Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
                                     Σ.
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MEDLINE=86118663; PubMed=3003577;
Yamamoto T., Ikawa S., Akiyama T., Semba K., Nomura N., Miyajima N., Saito T., Toyoshima K.;
Saito T., Toyoshima K.;
Similarity of protein encoded by the human c-erb-B-2 gene to epidermal growth factor receptor.";
Nature 319:230-234(1986).
Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M., Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Oksata Y., Salto B., Salto H., Sakai C., Sakai K., Sakazume N., Sano H., Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami Tagawa A., Takahashi F., Takaku-Akahira S., Takada Y., Tanaka T., Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases. EMBL, AKO31542; BAC27442.1; -; mRNA.
                                                                                                                 Ensembl; ENSWORGO000062312; Mus musculus.

RGI; MGI:95410; Exbb2.

RGO; GO:0016324; C:apical plasma membrane; IDA.

RGO; GO:0005515; P:protein binding; IPI.

RGO; GO:0005515; P:myelination; IDA.

RGO; GO:0007507; P:myelination; IMP.

RGO; GO:0007425; P:myelination; IMP.

RGO; GO:0007425; P:myelination; IMP.

RGO; GO:0007425; P:myelination; IMP.

RICEPPO; IPRO00494; EGFR_L.

RICEPPO; IPRO00512; Protein repeat.

RICEPPO; IPRO005125; Tyr_Dkinase.

RICEPPO; IPRO004019; Yr_Dkinase.

RICEPPO; IRRO04019; Yr_Dkinase.

RICEPPO; IRRO04019; Yr_Dkinase.

REAM; PFO1030; Recept L. domain; 1.

PFam; PFO1030; Recept L. domain; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 51; DB 2; Length 881; 100.0%; Pred. No. 0.91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE 881 AA; 97501 MW; 5D5042BE9F8F0836 CRC64;
                                                                                                                                                                                                                                                                                                                                   SMART; SM00261; FU; 2.
SMART; SM00219; TyrKc; 1.
PROSITE; PS00107; PROTEIN KINASE ATP; 1.
PROSITE; PS00101; PROTEIN KINASE DOM; 1.
PROSITE; PS00109; PROTEIN KINASE TYR; 1.
ATP-binding; Kinase; Nucleotide-binding; Transferase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
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NUCLEOTIDE SEQUENCE, AND VARIANT ALA-1170.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Name=ERBB2; Synonyme=HER2, NEU, NGL;
                                                                                                                                                                                                                                                                                                                          PD000001; Prot kinase; 1.
                                                                                                                                                                                                                                                                                                               PRINTS; PR00109; TYRKINASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                             Tyrosine-protein kinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       399 VMAGVGSPYV 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (Human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
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Rieder M.J., Livingston R.J., Daniels M.R., Montoya M.A., Chung M.-W., Miyamoto K.E., Nguyen C.P., Nguyen D.A., Poel C.L., Robertson P.D., Schackwitz W.S., Sherwood J.K., Witrak L.A., Nickerson D.A., "INIERS-SNPs, environmental genome project, NIEHS ES15718, Department of Genome Sciences, Seattle, WA (URL: http://egp.gs.washington.edu)."; submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE OF 1-191.
MEDLINE=87286898; Pubmed=303351;
Tal M., King C.R., Kraus M.H., Ullrich A., Schlessinger J., Givol D.;
Human HER2 (neu) promoter: evidence for multiple mechanisms for
MEDLINE-86070181; PubMed=2999974; Coussens L., Yang-Peng T.L., Liao Y.C., Chen E., Gray A., McGrath J., Seeburg P.H., Libermann T.A., Schlessinger J., Francke U., Levinson A., Ullrich A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X-RAY CRYSTALLOGRAPHY (2.52 ANGSTROMS) OF 23-629 IN COMPLEX WITH FAB. MEDLINE=22497871; Pubmed=12610629; DOI=10.1038/nature01392;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTIFICATION IN A COMPLEX WITH PIK3C2A AND EGFR, IDENTIFICATION IN COMPLEX WITH PIK3C2B AND EGFR, AND INTERACTION WITH PIK3C2B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     K-RAY CRYSTALLOGRAPHY (2.4 ANGSTROMS) OF 654-662 IN COMPLEX WITH HLA
                                                                                                                                                                                                                                                                                                                                   NUCLECTIDE SEQUENCE [GENOMIC DNA], AND VARIANTS CYS-452; VAL-655 AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PubMed=10805725;
Arcaro A., Zvelebil M.J., Wallasch C., Ullrich A., Waterfield M.D.,
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MEDLINE-94000386; PubMed-8104414;
Sarkar F.H., Ball D.E., Li Y.W., Crissman J.D.;
"Molecular cloning and sequencing of an intron of Her-2/neu (ERBB2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "A v-erbB-related protooncogene, c-erbB-2, is distinct from the c-erbB-1/epidermal growth factor-receptor gene and is amplified in a human salivary gland adenocarcinoma.";
Proc. Natl. Acad. Sci. U.S.A. 82:6497-6501(1985).
                                                                                                                                           Levinson A., Ullrich A.; "Tyrosine homology to EGF receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TISSUE-Mammary carcinoma;
MEDLINE-8527257; PubMed-2992089;
King C.R., Kraus M.H., Aaronson S.A.;
"Amplification of a novel v-erbB-related gene in a human mammary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND BETA-2 MICROGLOBULIN.
MEDLINE-20062861; PubMed-10593938; DOI=10.1074/jbc.274.51.36422;
Kubna J., Baralia M.A., Yan S., Collins B.J.; Paralia M.A., Yan S., Collins B.J.; Poblador binding of a HER-2/neu epitope (GP2) to HLA-A2.1 is due to lack of interactions with the center of the peptide.";
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Swiercz J.M., Kuner R., Offermanns S.;
"Plexin-B1/RhoGEF-mediated RhoA activation involves the receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Class II phosphoinositide 3-kinases are downstream targets of activated polypeptide growth factor receptors."; Mol. Cell. Biol. 20:3817-3830(2000).
                                                                                                                                                                                                                      shares chromosomal location with neu oncogene."; Science 230:1132-1139(1985).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Semba K., Kamata N., Toyoshima K., Yamamoto T., "A v-erbB-related protooncogene, c-erbB-2, is d
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transcriptional initiation.";
Mol. Cell. Biol. 7:2597-2601(1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE OF 737-1031.
MEDLINE=86016729; PubMed=2995967;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUCLEOTIDE SEQUENCE OF 832-909.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INTERACTION WITH PLXNB1
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GO; GO: 0006468; P:protein amino acid phosphorylation; TAS.

GO; GO: 0007169; P:regulation of angiogenesis; NAS.
DR GO; GO: 0007169; P:regulation of angiogenesis; NAS.
DR InterPro; PR000494; BGFR.
DR InterPro; IPR000494; BGFR.
DR InterPro; IPR000421; Purin_like.
DR InterPro; IPR001245; Tyr_Dkinase.
DR InterPro; IPR001245; Tyr_Dkinase.
DR InterPro; IPR001245; Tyr_Dkinase.
DR InterPro; IPR001049; Yir_Dkinase.
DR InterPro; IPR001049; Yir_Dkinase.
DR InterPro; IPR001049; Yir_Dkinase.
DR Fdam; PP00177; Purin_like; I.
DR Pfam; PR00175; Purin_like; I.
DR Pfam; PR00175; Purin_like; I.
DR Pfam; PR00109; TyrkINASE.
DR PRINTS; PR00109; TyrKINASE.
DR PRINTS; PR00109; TyrKINASE.
DR PROSITE; PS00107; PROTEIN KINASE ATP; I.
DR PROSITE; PS00109; PROTEIN KINASE DOM; I.
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Mammalia, Eutheria, Buarchontoglires, Glires, Rodentia, Sciurognathi,
Muroidea, Muridae, Murinae, Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bargmann C.I., Hung M.-C., Weinberg R.A.; "The neu oncogene encodes an epidermal growth factor receptor-related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JAN-1988 (Rel. 06, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
11-SEC-1998 (Rel. 48, Last sequence update)
Receptor tyrosine-protein kinase erbB-2 precursor (EC 2.7.1.112)
(p185erbB2) (C-erbB-2) (NEU proto-oncogene) (Epidermal growth factor receptor-related protein).
Name=Erbb2; Synonyms=Neu;
Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Receptor tyrosine-protein kinase erbB-2.
Extracellular (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 51; DB 1; Length 1255; 100.0%; Pred. No. 1.3;
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Magui T., Mann A.M., Macatee T.L., Garland B.M., Okamura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
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Submitted (NOV-2003) to the EMBL/GenBank/DDBJ databases
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SIGNAL 1 21 Potential.
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ATP (By similarity)
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MEDLINE=86118662; PubMed=3945311;
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Matches 10; Conservative
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TRANSMEM
TOPO DOM
DOMAIN
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ERBB2_RAT
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                                                                                                                                                                                                                                     WEDLINE-93194196; PubMed=8095488;

MEDLINE-93194196; PubMed=8095488;

MEDLINE-93194196; PubMed=8095488;

MEDLINE-93194196; PubMed=8085488;

Characterization of a new allele of the human ERBB2 gene by allele-reported of a new allele of the human ERBB2 gene by allele-reported of a new allele of the human ERBB2 gene by allele-reported of a new allele of the human ERBB2 gene by allele-reported of a new allele of the secretarion.

I. Genomics 15:426-429(1993).

I. G
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (Potential). Interacts with PRKCABP (By similarity). Binds PLXNB1. Part of a complex with EGFR and either PIK3C2A or PIK3C2B. May interact with PIK3C2B when phosphorylated on Tyr-1196. SUBCELLULAR LOCATION: Type I membrane protein.

PTM: Ligand-binding increases phosphorylation on tyrosine residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (By similarity).

POLYMORPHISM: There are fours alleles due to the variations in positions 654 and 655. Allele BI (Ile-654/Ile-655) has a frequency of 0.782; allele B2 (Ile-654/Val-655) has a frequency of 0.206; allele B3 (Val-654/Val-655) has a frequency of 0.012. SIMILARITY: Belongs to the Tyr protein kinase family. EGF receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MIM; 164870; ---
GO; GO: 0016021; C: integral to membrane; NAS.
GO; GO: 0016021; C: plasma membrane; NAS.
GO; GO: 0005886; C: plasma growth factor receptor activity; NAS.
GO; GO: 00043125; F: ErbB-3 class receptor binding; TAS.
GO; GO: 00043125; F: Protein heerocdimerization activity; NAS.
GO; GO: 0004283; F: receptor signaling protein tyrosine kinase . .;
GO; GO: 0008283; P: cell proliferation; TAS.
GO; GO: 00030879; P: heart development; TAS.
GO; GO: 00030879; P: neurogenesis; TAS.
GO; GO: 0003089; P: neurogenesis; TAS.
GO; GO: 0003089; P: neurogenesis; TAS.
                Cho H.-S., Mason K., Ramyar K.X., Stanley A.M., Gabelli S.B., Denney D.W. Jr., Leahy D.J.; "Structure of the extracellular region of HER2 alone and in complex with the Herceptin Fab."; Mature 421:756-760(2003)."
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EMBL; M11761; AAA35808.1; JOINED; Genomic_DNA.
EMBL; M11764; AAA35808.1; JOINED; Genomic_DNA.
EMBL; M11764; AAA35808.1; JOINED; Genomic_DNA.
EMBL; M11765; AAA35808.1; JOINED; Genomic_DNA.
EMBL; M11766; AAA35808.1; JOINED; Genomic_DNA.
EMBL; M11730; AAA35808.1; JOINED; Genomic_DNA.
EMBL; M11730; AAA35808.1; JOINED; Genomic_DNA.
EMBL; M12036; AAA35808.1; -; Genomic_DNA.
EMBL; M16791; AAA35808.1; -; Genomic_DNA.
EMBL; M16792; AAA58637.1; -; Genomic_DNA.
EMBL; M16792; AAA58637.1; -; Genomic_DNA.
EMBL; M16791; AAA58637.1; -; Genomic_DNA.
EMBL; M16791; AAA58637.1; -; Genomic_DNA.
EMBL; M16791; AAA58637.1; JOINED; Genomic_DNA.
EMBL; M16791; AAA511.1; -; Unassigned_DNA.
EMBL; M16791; AAA511.1; -; Unassigned_
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DT 25-0CT-2004 (
DT 13-SEP-2005 (
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DB (p185-RbB2) (
GN Name=ERBB2) (
GN Canis familia, But
OC Canis Eutlanis But
OC Canis Name=180 (
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SMART; SM00219; TyrK.

SMART; SM00219; TyrK.

PROSITE; PS00107; PROTEIN KINASE ATP; 1.

PROSITE; PS50011; PROTEIN KINASE TYR; 1.

PROSITE; PS00109; PROTEIN KINASE TYR; 1.

MULIGERE family; Nucleotide-binding; Phosphorylation; Kinase; Multigene family; Nucleotide-binding; Phosphorylation; Proto-oncogene; Receptor; Signal; Transferase; Transmembrane; Tyrosine-protein kinase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (By similarity). Selongs to the Tyr protein kinase family. EGF receptor
Smith R.A., Cohen S.M.;
"Direct DNA sequencing of the rat neu oncogene transmembrane domain reveals no mutation in urinary bladder carcinomas induced by N-butyl-N-(4-hydroxybutyl)nitrosamine, N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide or N-methyl-N-nitrosourea.";
Carcinogenesis 12:1975-1978(1991).
                                                                                                                  NUCLEOTIDE SEQUENCE OF 852-905.
TISSUE-Sciatic nerve;
MEDLINE-91222560; Pubmed-2025425; DOI=10.1016/0896-6273(91)90167-X;
                                                                                                                                                                                  "An extended family of protein-tyrosine kinase genes differentially expressed in the vartebrate nervous system."; Neuron 6:691-704(1991).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RGD; 2561; Brbb2.

GO; GO:0045595; P:regulation of cell differentiation; TAS.

GO; GO:0043127; P:regulation of cell proliferation; TAS.

InterPro; IPR000494; EGFR_L.

InterPro; IPR006512; Purin repeat.

InterPro; IPR006719; Prot_Kinase.

InterPro; IPR00179; Prot_Kinase.

InterPro; IPR001866; Tyr_Dkinase.

InterPro; IPR004049; YLP_Dkinase_AS.
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Pfam, PF01030, Recep L domain, 2.
Pfam, PF02757; XLP, 2.
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Interaction with PIK3C2B (By similarity)
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ATP (By similarity).
Phosphotyrosine (by autocatalysis) (By
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Mammalia, Eutheria, Laurasiatheria, Carnivora, Pissipedia, Canidae,
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25-0CT-2014 (Rel. 45, Last sequence update)
13-SBP-2005 (Rel. 48, Last annotation update)
Receptor tyrosine-protein kinase erbB-2 precursor (BC 2.7.1.112)
(p185erbB2) (C-erbB-2).
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Phosphotyrosine (by autocatalysis)
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iS -> CGLB (in Ref. 2).
6129264583011402 CRC64;
                        Receptor tyrosine-protein Extracellular (Potential).
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100.0%; Pred. No. 1.3;
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InterPro; IPR002048; BF-hand.
InterPro; IPR00494; BF-hand.
InterPro; IPR006211; Purin_like.
InterPro; IPR006212; Purin_repeat.
InterPro; IPR0061215; Tyr_pkinase.
InterPro; IPR001245; Tyr_pkinase.
InterPro; IPR008266; Tyr_pkinase.
InterPro; IPR004019; YLP_morif.
Ffam; PF00757; Purin_like; 1.
Pfam; PF01030; Recep_L_domain; 2.
Pfam; PF01030; Recep_L_domain; 2.
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PRINTS; PR00109; TYRKINASE.
ProDom; PD000001; Prot_kinase; 1.
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QEK3F9_RAT PRELIMINARY,

QBK3F9,

QBC3F9,

Q1-OCT-2002 (TEMBLE). 22, Lo

01-OCT-2004 (TEMBLE). 26, Lo
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nes 10; Conserv
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                                   Yokota H.;

"CDNA cloning of erbb-2 from canine mammary gland.";

"Submitted (OCT-197) to the EMBL/GenBank/DDBJ databases.

"I althought neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Not activated by EGF, TGF-alpha and amphiregulin (By similarity).

"C -1- CATALYTIC ACTIVITY: ATP + a protein tyrosine = ADP + a protein tyrosine phosphate.

"C -1- SUBUNIT: Heterodimer with each of the other ERBB receptors (Potential). Interacts with PRKCABP. Binds PLXNB1. Part of a complex with EGFR and either PIXSC2A or PIXSC2B. May interact with PIXSC2B when phosphorylated on Tyr-1200 (By similarity).

"C -1- SUBCELLULAR LOCATION: Type I membrane protein."
                                                                                                                                                                                                                                                                                This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
                                                                                                                                                                                                                               (By similarity).
-1- SIMILARITY: Belongs to the Tyr protein kinase family. EGF receptor subfamily.
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Extracellular (Potential)
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PROSITE; PS50011; PROTEIN KINASE DOM; 1.
PROSITE; PS500011; PROTEIN KINASE TYR; 1.
ATP-binding; Glycoprotein; Kinase; Multigene family;
Nucleotide-binding; Prophorylation; Receptor; Signal; Transferase;
Transmembrane; Tyrosine-protein kinase.
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ATP (By similarity).
Phosphotyrosine (by autocatalysis)
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ATP (By similarity).
Interaction with PIK3C2B (By
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Phosphotyrosine (Potential)
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HSSP; P04626; 1N82.
SNR, 018735, 23-628.
Ensembl; ENSCAFGO000016351; Canis familiaris.
InterPro; IPR000494; EGFR_L.
InterPro; IPR006211; Furin-like.
InterPro; IPR006211; Furin-like.
InterPro; IPR001245; Tyr_Dkinase.
InterPro; IPR001245; Tyr_Dkinase.
InterPro; IPR004019; YuP_morif.
InterPro; IPR004019; YuP_morif.
Pfam; PF00757; Furin-like; 1.
Pfam; PF00757; Furin-like; 1.
Pfam; PF00757; VuP; 2.
PRINTS; PR00109; TYRKINASE.
ProDom; PD000001; Proc_kinase; 1.
SMART; SM00219; TyrKC; 1.
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NUCLEOTIDE SEQUENCE
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Buarchontoglires; Glires; Rodentia; Sciurognathi;
Muridae; Murinae; Rattus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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GO; GO:0005524; F:ATP binding; IEA.
GO; GO:0005006; P:epidermal growth factor receptor activity; IEA.
GO; GO:0006468; P:epidermal growth factor receptor; IEA.
GO; GO:0006468; P:protein amino acid phosphorylation; IEA.
GO; GO:0007169; P:transmembrane receptor protein tyrosine kin.
(Potential)
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Watson P.A., Kim K., Chen K.-S., Gould M.N.;
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, 716182; AAMS0093.1; -; mRNA.
HSSP; P06494; 1N8Y.
SWR; Q8K3F9; 26-633.
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Last annotation update)
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SEQUENCE
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MEDLINE-2297043; PubMed-14621295;
MEDLINE-2297043; PubMed-14621295;
MEDLINE-2297043; PubMed-14621295;
MEDLINE-2297043; PubMed-14621295;
Saga Y., Nagase T., Ohara R., Inamoto S., Koseki H., Hiraoka S.,
Saga Y., Nagase T., Ohara O., Koga H.;
"Prediction of the coding sequences of mouse homologues of KIAA gene:
III. the complete nucleotide sequences of 500 mouse KIAA-homologous
cDNAs identified by screening of terminal sequences of cDNA clones
randomly sampled from size-fractionated libraries.";
DNA Res 10:167-180(2003).
HSSP: PI1362: 1AGW.
                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Buarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Mus.
                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GO:0016324; C:apical plasma membrane; IDA.
GO:000537; C:cytoplasm; IDA.
GO:0005515; F:protein binding; IPI.
GO:0007507; P:heart devoloment; IMP.
GO:0042552; P:myelination; IMP.
GO:0007422; P:peripheral nervous system development; IMP.
                                                                                         100.0%; Score 51; DB 2; Length 1259; 100.0%; Pred. No. 1.3;
                   PROSITE; PS00018; FF HAND; UNKNOWN 1.
PROSITE; PS00107; PROTEIN KINASE ATP; 1.
PROSITE; PS50011; PROTEIN KINASE DOM; 1.
PROSITE; P001109; PROTEIN KINASE TYR; 1.
SEQUENCE 1259 AA; 139101 MW; B724BD5CC33AE953 CRC64;
                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATP-binding, Kinase, Nucleotide-binding, Transferase.
                                                                                                                                                                                                                                                           05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
MKIAAJ23 protein (ENGRENCE).
Name=Erbb2; Synonyms=mKIAAJ023;
                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ensembl; ENSMUSG0000062312; Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SMART; SM00220; S_TKC; 1.
SWART; SM00219; TyrKC; 1.
PROSITE; PS00107; PROTEIN KINASE ATP; 1.
PROSITE; PS0011; PROTEIN KINASE DOM; 1.
PROSITE; PS00109; PROTEIN KINASE TYR; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           InterPro; IPR006211; Furin-11ke.
InterPro; IPR006211; Furin-11ke.
InterPro; IPR006212; Furin repeat.
InterPro; IPR006219; Prot Kinase.
InterPro; IPR001299; Ser_thr_pkinase.
InterPro; IPR001245; Tyr_pkinase.
InterPro; IPR008266; Tyr_pkinase.
InterPro; IPR008266; Tyr_pkinase.
                                                                                                                                                                                                                       OGZPEO MOUSE PRELIMINARY; PRT; QGZPEO; 05-JUL-2004 (TrEMBLrel. 27, Created)
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ProDom; PD000001; Prot_kinase; 1.
SMART; SM00261; FU; 4.
SMART; SM00220; S_TKC; 1.
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Pfam, PF01030; Recep L domain; 2.
Pfam; PF02757; YLP; 2.
                                                                                                                10; Conservative
                                                                                                                                                      777 VMAGVGSPYV 786
                                                                                                                                      1 VMAGVGSPYV 10
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                                                                                                                                                                                                                                                                                                          Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                              NUCLEOTIDE SEQUENCE
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SMR; Q6ZPE0; 72-679
                                                                                                      Local Similarity
                                                                                          Query Match
                                                                                                                Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -!- SIMILARITY: Belongs to the Tyr protein kinase family. EGF receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nakamura T., Ushijima T., Ishizaka Y., Nagao M., Arai M., Yamazaki Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Buarchontoglires, Glires, Rodentia, Sciurognathi,
Muroidea, Cricetidae, Cricetinae, Mesocricetus.
                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Cloning and activation of the Syrian hamster neu proto-oncogene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=94193007; PubMed=7908275; DOI=10.1016/0378-1119(94)90553-3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gene 140:251-255(1994).
-!- FUNCTION: Essential component of a neuregulin-receptor complex,
althought neuregulins do not interact with it alone. GP30 is a
potential ligand for this receptor. Not activated by EGF, TGF-
alpha and amphiregulin (By similarity).
-!- CATALYTIC ACTIVITY: ATP + a protein tyrosine = ADP + a protein
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- Symbol Freezodimer with each of the other ERBB receptors
- Symbol Freezodimer with each of the other ERBB receptors
- Symbol Freezodimer with ERFABB and ELFARBI. May interact with PRKCABP and FIXNBI. May interact with PRKCABP and FIXNBI. May interact with PIK3C2B when phosphorylated on Tyr-1196 (By similarity).
- SYMBCELLUIAR LOCATION: Type I membrane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence update)
13-SEP-2005 (Rel. 48, Last annotation update)
13-SEP-2005 (Rel. 48, Last annotation update)
(P18-2005 (Rel. 48, Last annotation update)
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143508 MW; A51D897408521860 CRC64;
                                                                                              100.0%; Score 51; DB 2;
100.0%; Pred. No. 1.3;
ive 0; Mismatches 0
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SMR; Q60553; 23-629.
Interpro; IPR000494; BGPR L.
Interpro; IPR0006211; Furin-like.
Interpro; IPR000512; Purin repeat.
Interpro; IPR000719; Prof Kinase.
Interpro; IPR00179; Tyr pkinase.
Interpro; IPR001245; Tyr pkinase.
Interpro; IPR008266; Tyr pkinase.
Interpro; IPR004019; YiP motif.
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PIR; 148161; 148161.
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                                                                                              Query Match 100.
Best Local Similarity 100.
Matches 10, Conservative
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1305 AA;
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Brachydanio rerio (Zebrafish) (Danio rerio)
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            REMARY; SM00219; TyrKC; 1.

REMARY; SM00219; TyrKC; 1.

RESIDENT PROSITE; PS00107; PROTEIN KINASE_ATP; 1.

REMOSITE; PS00107; PROTEIN KINASE_DM; 1.

REMOSITE; PS00109; PROTEIN KINASE_TYP; 1.

The Phinding; Disease mutation; Glycoprotein; Kinase; Multigene family; Mucleotide-binding; Phosphorylation; Proto-oncogene; Receptor; Signal; Transferase; Transmembrane; Tyrosine-protein kinase.

Transferase; Transmembrane; Tyrosine-protein kinase erbB-2.

TYPOD DOM 22 652 Bxtracellular (Potential).

TYPOD DOM 676 1254 Cytoplasmic (Potential).

FT TOPO DOM 676 1254 Cytoplasmic (Potential).

FT TOPO BON 676 1254 Cytoplasmic (Potential).
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(Potential).
(Potential).
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Phosphotyrosine (by autocatalysis)
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59 V -> E (in oncogenic NEU).
138253 MW; 974C3791C21F2BE1 CRC64;
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05EBY4.
05EBY4.
10-MAY-2005 (TrEMBLrel. 30, Created)
10-MAY-2005 (TrEMBLrel. 30, Last sequence update)
10-MAY-2005 (TrEMBLrel. 30, Last annotation update)
10-MAY-2005 (TREMBLREL. 30, Last annotation update)
10-MAY-2005 (TREMBLREL. 30, Last annotation update)
Name-erbb2; ORFNames=zgc:63601;
                                                                                                                                                                                                                                                                               By similarity.
ATP (By similarity)
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Pred. No. 4.8;
1; Mismatches 0
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90.0%;
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1254 AA,
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MOD_RES
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Q58BY4 BRA
ID Q58BY
AC Q58BY
DT 10-MA
DT 10-MA
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.
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13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
14-SEP-2005 (TrEMBLrel. 31, Last annotation update)
15-SEP-2005 (TrEMBLrel. 31, Last annotation update)
16-SEP-2005 (TrEMBLrel. 31, Last annotation update)
16-SEP-2005 (TrEMBLrel. 31, Last annotation update)
17-SEP-2005 (TrEMBLrel. 31, Recomportation, Pezizomycotina, Sordariomycetes, Hypocreomycetidae, Hypocreales; Nectriaceae; Gibberella.
                                                                                                                                                                                                               Lyons D.A., Pogoda H.M., Voas M.G., Woods I.G., Diamond B., Ni Arana N., Jacobs J., Talbot W.S.; Lerbb3 and erbb2 Are Essential for Schwann Cell Migration and Myelination in Zebrafish."; Curr. Biol. 15:513-524(2005).
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SWART; SW00261; FU; 3.
SWART; SW00220; STKC; 1.
SWART; SW00219; TyrKc; 1.
PROSITE; PS00107; PROTEIN KINASE ATP; 1.
PROSITE; PS0011, PROTEIN KINASE DOM; 1.
PROSITE; PS00119; PROTEIN KINASE TYR; 1.
SEQUENCE 1275 AA; 140828 MW; 67462B4F1B68492F CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                               NUCLEOTIDE SEQUENCE.
Pogoda H.-M., Voas M.G., Talbot W.S.;
"Analysis of a zebrafish erbb2 gene.";
"Analysis of a zebrafish erbb2 gene.";
Submitted (JAN-2005) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EMEL; AY914799; AAXO9341.1; -; mENB., ZFIN; ZDB-GENE-031118-121; zgc:63601.

INTERFYO; IPR000494; EGFR L.

INTERFYO; IPR006211; Furin-like.

INTERFYO; IPR006212; Furin-like.

INTERFYO; IPR006219; Furin-repeat.

INTERFYO; IPR000219; Sor_Chr_pkinase.

INTERFYO; IPR000219; Sor_Chr_pkinase.

INTERFYO; IPR000249; TYR_pkinase_AS.

PÉAM; PF00169; PKINASE; 1.

PÉAM; PF00169; PKINASE; 1.

PEAM; PF01030; Recep L domain; 2.

PRINTS; PR00199; TYRENINSE.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88.2%;
90.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
04HW43 GIBZE PRELIMINARY;
AC 04HW43;
DT 13-SEP-2005 (TrEMBLrel. 31,
DT 13-SEP-2005 (TrEMBLrel. 31,
DT 13-SEP-2005 (TrEMBLrel. 31,
DE Hypothetical protein.
ORTHANSSEPTO1655.1;
OS Gibberella zeae PH-1.
OC Eukaryota, Fungi; Ascomycote
OC Hypocreomycetidae; Hypocreal
OC STATALB-PH-1;
RA Arachchi H.M., Barna N., Bar
Boukhgalter B., Butler J., Choepel Y., Choepel Y., Collymore A., Cardyna S., Dodge S., Dooley, R. Brickson J., Parco S., Perreis, R. Gardyna S., Garbrish R. Hagoplan D., Hagos B., Hall
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 90.0
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      766 VMAGVASPYV 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 VMAGVGSPYV 10
                                                                                                                                                                           NUCLEOTIDE SEQUENCE.
                                                                                                      NCBI_TaxID=7955;
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Length 270;

. DB

Score 42; Pred. No. 1

82.4%; 90.0%;

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1 1 270 AA; 30448 MW; 29F922C1476C58A8 CRC64;
                                                 Query Match
Best Local Similarity 90.vv,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Name=ERBB2
NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IGRPAMB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
Q4H1F2_HUMAN
                                                                                                                                                                                                                                                                                                                                 RESULT 13
QSJGCS PYR
ID QSJGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ERBB2
     SO
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A Jaillon O. Aury J.M., Brunet F., Petit J.L., Stange-Thomann N.,
A Mauceli E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,
A Mauceli E., Bouneau L., Fischer S., Lutfalla G., Dossat C., Segurens B.,
A Mathouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,
A Anthouard V., Jubin C., Castelli V., Katinka M., Vacherie B.,
Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
A Parra G., Lardier S., Brottier P., Coutanceau J.P., Gouzy J.,
Parra G., Lardier G., Chapple C., McKernan K.J., McEwan P., Bosak S.,
Kellis M., Volff JN., Guigo R., Zody M.C., Mesirov J.,
Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M.,
Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
Mincker P., Lander E.S., Weissenbach J., Roest Crollius H.;
"Genome duplication in the teleost fish Tetraodon nigroviridis reveals
                 Kells C., Landers T., Levine R., Lindblad-Toh K., Liu G., Lui A., Mabbitt R., MacLean C., Macdonald P., Major J., Manning J. Mathews C., Maucell E., McCarthy M., Meldrim J., Meneus L., Mitova T., Mlenga V., Murphy T., Naylor J., Nguyen C., Nicol R., Nielsen C.B., Norbu C., O'Connor T., O'Donnell P., O'Neil D., Oliver J., Peterson K., Phunkhang P., Pierre N., Purcell S., Rachupka A., Ramasamy U., Raymond C., Retta R., Rise C., Rogor P., Roman J., Schauer S., Schupback R., Seaman S., Severy P., Smirnov S. Smith C., Spencer B., Stange-Thomann N., Stojanovic N., Stubbs M., Talamas J., Tesfaye S., Theodore J., Topham K., Travers M., Vassiliev H., Venkataraman V.S., Viel R., Vo A., Wang S., Wilson B., Wu X., Wyman D., Young G., Zainoun J., Zembek L., Zimmer A., Zody M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tetraodon nigroviridis (Green puffer).

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Buteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetradontoidea; Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
Chromosome undetermined SCAF8938, whole genome shotgun sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             which is
                                                                                                                                                                                                                                                                                                                                                                                                                                               CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84.3%; Score 43; DB 2; Length 519; 70.0%; Pred. No. 19; tive 3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Genoscope, Whitehead Institute Centre for Genome Research, Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                        "Fusarium graminearum genome sequence.";
Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hypochetical protein.
SEQUENCE 519 Aa; 57083 MW; 4E4CE0E4972A2FA9 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACM01000446; EAA70307.1; -; Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAE01008938; CAF91642.1; -; Genomic_DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           270 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Created)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORFNames=GSTENG00006492001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13-SEP-2005 (TrEMBLrel. 31,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q4T640_TETNG PRELIMINARY;
Q4T640;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 70.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         preliminary data.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tetradontoidea; To
                                                                                                                                                                                                                                                                                                                                                                                                                        Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Fragment)
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O47640
TET
10 Q4764
AC Q4764
AC Q4764
DT 13-SE

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Matches
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Mammalia, Butheria, Buarchontoglires, Primates, Catarrhini, Hominidae,
  Gaps
                                                                                                                                                                                                                                                                                                                               Pyrococcus kodakaraensis (Thermococcus kodakaraensis).
Archaea; Buryarchaeota; Thermococci; Thermococcales; Thermococcaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Yamanaka S., Sato M., Fujisaki R., Sakurada A., Inoue A., Nukiwa T., Kondo T., Horii A.;
Kondo T., Horii A.;
"Exploration of siRNA Targeting EGFR as a Candidate for a Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PubMed=15710748; DOI=10.1101/gr.3003105; Vilhui T., Atcumi H., Kanai T.; Matcumi R., Atcumi H., Kanai T.; McCumi R., Atcumi H., Kanai T. T. Matcumi R., Fujiwara S., Imanaka T.; "Complete genome sequence of the hyperthermophilic archaeon Thermococcus kodakaraensis KOD1 and comparison with Pyrococcus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Therapeutic Application in Lung Cancer.";
Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
EMBL; AB221349; BAE15959.1; -; Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               286 AA; 30729 MW; DA4E5B901438EC65 CRC64;
                                                                                                                                                                                                                                                Last sequence update)
Last annotation update)
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Last annotation update)
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Pred. No. 26;
2; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   63 AA
                                                                                                                                                                                                                                                                                         Probable fumarate hydratase, alpha subunit.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EMBL; AP006878; BAD86154.1; -; Genomic_DNA.
GO; GO:0016829; P:lyase activity; IEA.
InterPro; IPR004646; TtdA_fumA_fumB.
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGR00722; ttda_fuma_fumB; 1.
                                                                                                                                                                                                                            Created)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genome Res. 15:352-363 (2005).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80.4%;
                                                                                                                                                                                                                        10-MAY-2005 (TrEMBLrel. 30, 10-MAY-2005 (TrEMBLrel. 30, 10-MAY-2005 (TrEMBLrel. 30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-SEP-2005 (TrEMBLrel. 31, 13-SEP-2005 (TrEMBLrel. 31, 13-SEP-2005 (TrEMBLrel. 31,
                                                                                                                                                            S PYRKO
QSJGCS PYRKO PRELIMINARY;
QSJGCS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 70...
Sest Local Similarity 70...
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Q4H1F2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF05681; Fumerase;
                                                                               126 VMAGVGSMYV 135
                                        1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 VMAGVGSPYV 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Complete proteome. SEQUENCE 286 AA;
                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=69014;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
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1;
                                                                                                                                                                                                                                                                                                                                 Homo sapiens (Human).
Bukaryota; Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Euarchontoglires, Primates, Catarrhini, Hominidae,
                                                                                                                                                                                                                                                                                                                                                                                                                            VUCLECTIDE SEQUENCE.
Yamanaka S., Satco M., Fujisaki R., Sakurada A., Inoue A., Nukiwa T.,
Kondo T., Horii A.;
"Exploration of siRNA Targeting EGFR as a Candidate for a Novel
Therapeutic Application in Lung Cancer.";
Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
BMBL, AB221350; BAEIS960.1; -; Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Gaps
                                                                                       1; Gaps
                                                       Score 40.5; DB 2; Length 63; Pred. No. 7.5; 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78.4%; Score 40; DB 2; Length 65; 100.0%; Pred. No. 9.7; tive 0; Mismatches 0; Indels
1 1
63 63 63 WW, EE62C915FB7B6D6A CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      65 65
65 AA; 7111 MW; BF169BFB4415620F CRC64;
                                                                                                                                                                                                            FI HUMAN
Q4H1F1 HUMAN PRELIMINARY; PRT; 65 AA.
Q4H1F1,
13-SEP-2005 (TrEMBLrel. 31, Created)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
13-SEB2 (Fregment)
Name-ERBB2;
                                                         Query Match
Best Local Similarity 90.9%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 78.4 Best Local Similarity 100. Matches 8; Conservative
                                                                                                                                      4 VMAGVGGSPYV 14
                                                                                                                     1 VMAGV-GSPYV 10
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NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NON TER
NON TER
SEQUENCE
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SEQUENCE
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Q4H1F1_HUM
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Search completed: April 11, 2006, 19:34:40 Job time : 233 Becs

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April 11, 2006, 19:15:04; Search time 184 Seconds (without alignments) 23.879 Million cell updates/sec
GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd
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    protein search, using sw model

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Gapop 10.0 , Gapext 0.5
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                                                                                                                                                                                                                                         1 VMAGVGSPYV 10
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Perfect score:
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Minimum DB seq length: 0 Maximum DB seq length: 10

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

geneseqp2003as:*geneseqp2003bs:* A_Geneseq_21:* .: geneseqp1980s:* geneseqp1990s:* geneseqp2001s:*geneseqp2002s:* geneseqp2000s:* geneseqp2005s:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Tumour an Human HLA Immunogen MHC class Immunogen Human HER Human HLA Human cER HER-2/neu HLA A2 bi Human Her Human HLA HER2/neu HER2/neu HER-2/neu mmunoger Human HER Human Her Aar61525 Peptide Description Aab99690 Aag89003 Aag88772 Abb76755 Aae26800 Abu63012 Ade97756 Adm12647 Aay46001 Aay46413 Aea36306 SUMMARIES AAG89003 AAG88772 ABB76755 AAE26800 ADE97756 ADM12647 **4EA36306** ABU63012 Length Query Match Score Result

Aag88941 HER2/neu Adg38697 Human Her Adw30548 HLM bindi Adw30664 HLM bindi		TRP- HIV HIV	HIV HIV HIV	Adn64625 HLM bindi Adp80235 Human HLM Amm22702 HIV pepti Aam22701 HIV pepti Aag93812 Human com
4 AAG88941 7 ADG38697 7 ADW30548 7 ADW30664	8 ADP79932 4 AAG88321 4 AAG88503 4 AAM23398	2 AAW30834 4 AAM23323 4 ABP14007 4 ABP19510	4 ABP14013 4 ABP18334 4 ABP16406 7 ADN14184 .	8 ADN64625 8 ADP80235 4 AAM22702 4 AAM22701 4 AAG93812
41 80.4 9 41 80.4 9 41 80.4 9	41 80.4 40 78.4 9 32 62.7 9 29 56.9 8	29 56.9 29 56.9 29 56.9 29 56.9		29 56.9 10 29 56.9 10 28 54.9 8 28 54.9 8 27 52.9 10
2 2 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4	330		6 8 8 8 4 7 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	ተ ሪ ጥ ታ ጥ ተ ሪ ጥ ታ ጥ

ALIGNMENTS

antigen; epitope; immunogenic target protein; PSA; HBVc; HBVe; EBV; HIVI; plasma specific antigen; hepatitis B virus; Epstein Barr; human immunodeficiency virus; human papilloma virus; p53; c-ERB2; MAGE-1; melanoma antigen; surface antigen; surface antigen; pharmaceutical composition; in vivo; ex vivo; therapeutic; diagnostic; MHC class I molecule; major histocompatability complex; HLA-A2.1; 9mer; 10mer; anchor; human leukocyte antigen. Peptide fragment (1.0738) of c-ERB2 binds HLA-A2.1. AAR61525 standard; peptide; 10 AA. (revised) 25-MAR-2003 11-MAY-1995 AAR61525 **AAR61525**

94WO-US002353 Homo sapiens. WO9420127-A1. 04-MAR-1994; 15-SEP-1994.

Kast 93US-00027146. 93US-00073205. 93US-00159184. Grey HM, Sette A, Sidney J, WPI; 1994-302678/37. (CYTE-) CYTEL CORP. 05-MAR-1993; 29-NOV-1993;

Immunogenic peptide(s) having an HLA-A2.1 binding motif - used for treatment or prophylaxis of cancer, virus infection or autoimmune diseases

Example 5; Page 108; 138pp; English.

AARS9496-R61666 are immunogenic 10mer peptides that contain a HLA-A2.1 binding motif. These peptides bind HLA-A2.1 and have a binding a affinity of at least 1% as compared to a reference peptide (AAR71293). AAR61525 has an ICS0 of 0.018 and the sequence occurs at position 773 in the human

Immunogen

Aay45527

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Synthetic.
                                                                                                AAW36826;
    RESULT 3
                                4AW3682
                                                                                                   AAR97508 is a peptide capable of activating cytotoxic T lymphocytes (CTLs) which specifically target malignant cells. The peptide corresponds to amino acids 773-782 of human Her-2/Neu protein. CTL- activating peptides can be used in a vaccine for protecting against tumour cell formation. CTLs activated by the peptides will lyse tumour cells displaying specific peptides. Antibodies against CTL- activating peptides are useful for the identification of other similar compounds which may be useful for treating cancer or virally- infected cells, or for diagnosis. The peptide and vaccines produced provide immunity to a high percentage of different ethnic groups, i.e. those with different HLA alleles
c-BRB2 gene product. Peptides of the invention can induce cytotoxic T lymphocytes which can react with target cells. They can be used for the treatment or prophlyaxis of cancer, eg. prostate cancer or lymphoma, etc. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           p53; Her-2; Neu; aa; amino acid; CTL; cytotoxic T lymphocyte; target; malignant cell; antigenic; vaccine; immunisation; activation.
                                                                                                                                                                                                                       Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In vivo activation of tumour-specific cytotoxic T lymphocytes - by contacting with polypeptide(8) derived from human p53 or Her-2/Neu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytotoxic I lymphocyte-activating Her-2/Neu-specific peptide
                                                                                                                                                                   100.0%; Score 51; DB 2; Length 10; 100.0%; Pred. No. 0.013; ive 0; Mismatches 0; Indels
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100.0%; Pred. No. 0.013;
ive 0; Mismatches 0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                      AAR97508 standard; peptide; 10 AA.
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                                                                                                                                                                                                                     10; Conservative
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                                                                                                                                                                                                                                                                                                              1 VMAGVGSPYV 10
                                                                                                                                                                   Query Match
Best Local Similarity
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                                                                                                                         Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-DEC-1994;
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Syntheric peptides wherein solutions the anchor motif for human leukocyte antigen (HLA) A2.1. The present peptide is based on positions a leukocyte antigen (HLA) A2.1. The present peptide is based on positions influence with activity of these peptides to inhibit the binding of an influence virus matrix protein peptide M1 to HLA A2.1 was measured by inhibition of lysis by an M1 specific, HLA A2.1 restricted, cytotoxic T lymphocyte (CTL) clone. The present protein showed 55% inhibition. The peptides were also tested for their ability to elicit an immune response in vivo. However, only H3 (AMM36824) and H7 (AMM36826) were able to do this will be a transgenic, non-human vertebrate (that has been modified to express at least one HLA antigen), so that the animal produces CTL which displays HLA-restricted T-cell receptor (TCR) specificity for the animal beta chains of such TCRs can be amplified from CTLs produced in the above manner. Cells expressing recombinant TCRs are used to identify antigens are a more convenient source of CTL than the tumour infiltrating mice are a more convenient source of CTL than the tumour side of the allocation of the animal convenient source of CTL than the tumour side of the allocation of the animal convenient source of CTL than the tumour side of the animal convenient source of CTL than the tumour side of the allocation convenient source of CTL than the tumour side of the animal convenient source of CTL than the tumour side convenient.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic peptides AAW36824-40 are based on the sequence of the human Her
                                                                                                                                                                                                                                                                                                                       Her-2/neu protein; human leukocyte antigen A2.1; HLA;
cytotoxic T lymphocyte; CTL; immune response; tumour-associated antigen;
T-cell receptor; TCR; tumour treatment.
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reactions and short peptide derivatives of TCR are more economical to
produce than TCR itself, particularly when expressed as a single-chain
molecule rather than as a dimer
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                                                                                                                                                                                                                                                Immunogenic peptide H7 based on the human Her-2/neu protein.
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100.0%; Pred. No. 0.013;
ive 0; Mismatches 0;
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AAW36826 standard; peptide; 10
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                                                                                                                                                                    (first entry)
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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                                                                                                                                                                    23-MAR-1998
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RESULT 4

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Gaps

Local Similarity 100. nes 10; Conservative

Matches

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VMAGVGSPYV

AAW70071

Synthetic. Homo sapiens WO9833888-A1 30-JAN-1998; 31-JAN-1997;

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06-AUG-1998

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16-NOV-1998
AAW77132
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequences shown in AAW70053 to AAW70075 represent peptides derived from HER-2/neu (cerB-2) antigen. The peptides can bind to a human leukcoyte antigen (HLA), HLA-21, and are used to exemplify the method of invention of producing antigen-specific cytooxic T cells (CTLS) in vitro. The peptides class I major histocompatibility complex (MFC) molecules with antigen presenting calls (APCS) pretreated with pretreatment growth factors, and incubating the APCS with purified CDB cells in the presence of a least 2 incubation growth factors, thereby producing antigen-copecific CTLS. A method for specifically killing target cells in a human patient is also provided which comprises obtaining a fluid sample containing CTLS from a patient, contacting the cytocoxic T cells with the cytocoxic growth factors, where the APCS comprise class I MHC molecules. The pretreated APCS companies class I MHC molecules. The pretreated APCS contacted with a carrier to form a composition. The composition can then be administered to the patient. The activated CTLS which are contacted with a carrier to form a composition. The composition can then be administered to the patient. The activated CTLS can be used for treating cancers, immune disorders, viral infections. ADDS, hepatitis, the activated CTLS can be used for treating cancers, immune disorders, viral infections. ADDS, hepatitis,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Production of antigen-specific cytotoxic T cells - by incubating immunogenic peptide(s) from antigen that binds class I major histocompatibility complex molecules with pre-treated antigen presenting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                      human leukocyte antigen; HLA; tumour associated antigen; cancer; antigen presenting cell; APC; immunogenic peptide; immune disorder; viral infection; AIDS; hepatitis; bacterial infection; malaria;
                                                                                                                                                                                              Cytotoxic T lymphocyte; CTL; major histocompatibility complex; MHC;
                                                                                                                                               HER-2/neu derived HLA-A2.1 binding peptide 19 (residues 773-782).
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                                                                                                                                                                                                                                                                                               fungal infection; tuberculosis; melanoma; HER-2/neu; cerB-2
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AAW70071 standard; peptide; 10 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98WO-US001959
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                                                                                           22-OCT-1998 (first entry)
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ses 10; Conser
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AAW77132 standard; peptide; 10 AA.

RESULT 5
AAW77132
ID AAW7

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Query Match

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specific cytotoxic T lymphocyte response. These peptides are are cysteine-depleted mutants of a native disease-specific CTL epitope. The cysteine -depleted CTL epitopes alloit a stronger or more specific CTL response immunes an ative epitope. The epitopes can be used in a disease-specific immunogen to protect a mammal against disease in particular melanomas. The peptides may also be used to screen a sample for the presence of an antigen with the same epitope, or with a different cross-reactive epitope
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disease specific immunogen - comprises disease specific cytotoxic T lymphocyte epitope used to elicit melanoma specific CTL response.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 10;
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                                                                                     Tyrosinase; tyrosinase cytotoxic lymphocyte response; cytotoxic T lymphocyte; cysteine-depleted; melanoma.
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100.0%; Pred. No. 0.013;
iive 0; Mismatches 0
                                           HER-2/neu synthetic peptide epitope 2.
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                                                                                                                                                                                                                                                                                                                                                                                                (UYVI-) UNIV VIRGINIA PATENT FOUND
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(first entry)
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Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                                                              Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; HER2/neu; epitope; human leukocyte antigen; HLA; T cell;
immune response; vaccine; tumour; cancer; cytostatic; immunostimulant;
tumour-associated antigen; T lymphocyte; cytotoxic T lymphocyte; CTL.
                                                                                                                                              Compositions for use in a vaccine for treating, e.g., breast, lung and colon cancer comprises at least one peptide that comprises an isolated epitope of a tumor-associated antigen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                             Keogh E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.013; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HER2/neu epitope HLA-A2 supermotif-bearing peptide #16.
                                                                             Southwood S, Celis E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAG89003 standard; peptide; 10 AA.
                                                                                                                                                                                                     Claim 1; Page 76; 86pp; English
                                                                              Sette A, Sidney J,
99US-0170448P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-00458299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-DEC-2000; 2000WO-US033591
           05-APR-2000; 2000US-00543608
30-MAY-2000; 2000US-00583200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VMAGVGSPYV 10
                                                   (EPIM-) EPIMMUNE INC
                                                                                                                     WPI; 2001-381489/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 10, Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200141787-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-JUN-2001
                                                                                             Chesnut R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                             Fikes J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAG89003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loc
Matches
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The present into described are:

Also described are: (1) a clonal cytotoxic T lymphocyte (CTL) that is culture in vitro and binds to a complex of an epitope (1), bound to a culture in vitro and binds to a complex of an epitope (1), bound to a culture in vitro and binds to a complex of an epitope (II), bound to a culture in vitro and binds to a complex of an epitope (II), bound to a acids that have anothe peptide is less than 50 contiguous amino cadds that have look identity with a native peptide sequence of HER2/neu; (2) a vaccine composition (III) comprising (III) and a saccine composition (III) comprising (III). (1) has cytostatic and excipient; (4) an isolated nucleic acid encoding a peptide comprising (I). (1) are useful for inducing a callular immune responses (I), (II) and (III) are useful for inducing callular immune responses for the prevention and treatment of cancer. (I) and (III) are useful for monitoring or evaluating an immune response to a tumour-associated detecting the presence of bound T lymphocyte et (II) or (III). Epitope (C based vaccines mean that immunosuppressive epitopes that may be present or anigen multiple antigens may be avoided. Selected epitopes and be combined to enhance immunogenicity. The possible pathological side effects caused by infectious agents or whole protein antigen is eliminated. The vaccine selected antigens from the same pathological side effects caused by infectious agents or whole protein antigen is eliminated. The vaccine celected antigens from the same pathological side effects caused from altiple tumour-associated molecules addressing the problem of tumour-vacionity and reducing the likelihood of tumour escape due to antigen loss. AAG88266 to AAG89121 represent amino acid sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention describes isolated prepared HBR2/neu epitopes (I)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; HER2/neu; epitope; human leukocyte antigen; HLA; T cell; immune response; vaccine; tumour; cancer; cytostatic; immunostimulant; tumour-associated antigen; T lymphocyte; cytotoxic T lymphocyte; CTL.
                                                                                                                                                                                                                                                                                           An isolated prepared HER2/neu epitope useful in a vaccine for inducin
cellular immune responses for the prevention and treatment of cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                               Sette A, Sidney J, Southwood S, Chesnut R, Celis E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.013; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HER2/neu A2 supermotif crossbinding peptide #16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAG88772 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; Page 189; 199pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-DEC-2000; 2000WO-US033591.
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nes 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 WAGVGSPYV 10
(EPIM-) EPIMMUNE INC
                                                                                                                                                                                                          WPI; 2001-374995/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200141787-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-JUN-2001.
                                                                                 Fikes J,
Keogh B;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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Gross DA;

Scardino A,

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Antiviral; anti-HIV; cytostatic; epitope; HLA A2.1;
human leukocyte antigen; immunotherapy; cancer; viral infection; vaccine.
                                                                                                                                                                                                                                                                                                                                                                                  Tumour antigen epitope HER-2/neu 773 presented by HLA A2.1.
                                                                                                                                                                                                                                                                        100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.013; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                               ABB76755 standard; peptide; 10 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-JUL-2000; 2000FR-00009591
99US-00458299
                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                Local Similarity 100
                                                                                                                                                                                                                                                                                                   1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                VMAGVGSPYV 10
            (EPIM-) EPIMMUNE INC
                                           WPI; 2001-374995/39
                                                                                                                                                                                                                                                               Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                        31-MAY-2002
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10-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                            25-JAN-2002
                                                                                                                                                                                                                                                                                                                                                           ABB76755;
                                                                                                                                                                                                                                                                            Query Match
                        Fikes J,
Keogh B;
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Identifying subdominant or cryptic epitopes, useful in immunotherapy of cancer and viral infection, comprises testing modified, non-immunogenic peptides for induction of cytotoxic T cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            presented by HLA (human leukocyte antigen) Class I molecule A2.1. The epitopes or chimeric polypeptides containing them and nucleic acid encoding them are useful for preventative or curative immunotherapy of cancer and viral infections, particularly where used as vaccines. The present peptide was used to illustrate the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present invention relates to subdominant/cryptic epitopes that are
                                                                                  (INRM ) INSERM INST NAT SANTE & RECH MEDICALE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 1; Page 12; 62pp; French.
                                                                                                                                                                    Kosmatopoulos K, Tourdot S,
21-JUL-2000; 2000FR-00009591.
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                                                                                                                                                                                                                                                      WPI; 2002-189846/25.
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nes 10; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-DEC-2002
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAE26800
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes isolated prepared HER2/neu epitopes (I).

Also described are: (1) a clonal cytotoxic T lymphocyte (T) that is culture in vitro and binds to a complex of an epitope (I). Dound to a human leukocyte antigen (HLA) molecule; (2) a peptide (II) comprising (I) and a second epitope and the peptide is less than 50 contiguous amino cacide that have 100% identity with a native peptide sequence of HER2/neu; (3) a vaccine composition (III) comprising (I) and a pharmaceutical excipient; (4) an isolated nucleic acid encoding (II). (II) has cytosetatic and immunostimulant activities, and can be used in vaccines. (I), (II) and (III) are useful for inducing cellular immune responses for the monitoring or evaluating an immune response to a tumour-associated antigen when incubated with a T lymphocyte sample form a patient and detecting the presence of bound T lymphocyte completed may be present to man that immunosuppressive epitopes that may be present to in whole antigens may be avoided. Selected epitopes may be combined to incubate or whole may be avoided. Selected epitopes may be combined to incubate or whole may be avoided. Selected epitopes may be varied or who ware the continued or whole may be avoided. Selected epitopes may be varied the vaccine or whole may be avoided. Selected epitopes may be varied the varied of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour variability and reducing the likelihood of tumour escape due to antigen loss. AAG88266 to AAG89121 represent amino acid sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          enhance immunogenicity. The possible pathological side effects caused by infectious agents or whole protein antigen is eliminated. The vacchine provides the ability to direct and focus an immune response to multiple selected antigens from the same pathogen. Epitope-based anti-tumour vacchines provides the opportunity to combine epitopes derived from multiple tumour-associated molecules addressing the problem of tumour variability and reducing the likelihood of tumour escape due to
                                                                                                                                                                                                                                                                                                                                                                                              An isolated prepared HER2/neu epitope useful in a vaccine for inducing cellular immune responses for the prevention and treatment of cancer.
                                                                                                                                                                                 Celis E;
                                                                                                                                                                                 Chesnut R,
                                                                                                                                                                                 Southwood S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Page 179; 199pp; English
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Gaps

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Length 10; 0; Indels

100.0%; Score 51; DB 5; 100.0%; Pred. No. 0.013;

Mismatches

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Treating a subject with cancer comprises combining the CD+8 cells, which are stimulated with non-naturally occurring antigen-presenting cell line, with adherent blood monocytes and inoculating the subject with CD8+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to a method of treating a subject with cancer. The method involves combining the CD+8 cells, which are stimulated with non naturally occurring antigen-presenting cell (nnAPC) line, with adherent blood monocytes and inoculating the subject with CD8+ suspension. The
                                                                                                                                                                                                                    Human; cancer; breast cancer; ovarian cancer; melanoma; cell therapy; epitope; human leucocyte antigen; HLA-A2.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peterson PA;
                                                                                                                                                                                           Human HLA-A2.1 restricted HBR-2/new peptide epitope #6
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Moriarty A, Leturcq DJ, Jackson MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Page 92; 99pp; English.
                                                                                                     AAE26800 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                       (ORTH ) ORTHO-MCNEIL PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                         20-PEB-2001; 2001US-0270252P.
                                                                                                                                                                                                                                                                                                                                                             19-FEB-2002; 2002WO-US005748.
                                                                                                                                                                (first entry)
1 VMAGVGSPYV 10
                            1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-667033/71.
                                                                                                                                                                                                                                                                                                   WO200265992-A2
                                                                                                                                                                                                                                                                       Homo sapiens.
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Heiskala M;
                                                                                                                                                                                                                                                                                                                                 29-AUG-2002
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Gaps

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The invention relates to a novel method for treating viral infection in a subject. The method comprises preparing an antigen presentation cell lineage (nnAPC), collecting CD8+ cells from the subject, stimulating CD8+ cells using the nnAPC, culturing CD8+ cells in the presence of interleukin-2 (IL-2) and/or IL-7, mixing peripheral blood monocytes from the subject, subjecting the components to gamma irradiation, combining the CD8+ cells with adhesive peripheral blood monocytes and inoculating the CD8+ suspended solid to the subject. The method of the invention demonstrates virucide and cytostatic activities and may be useful for
method is useful for treating cancer e.g. ovarian cancer, breast cancer and melanoma etc. It is also useful in cell therapy. The present sequence is human leukocyte antigen A2 (HLA-A2).1 restricted peptide epitope used to treat breast and ovarian cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Treating a subject with cancer comprises combining the CD+8 cells, which are stimulated with non-naturally occurring antigen-presenting cell line, with adherent blood monocytes and inoculating the subject with CD8+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treating a viral infection or tumor in a subject via cell therapy. The current sequence is that of a human HER-2/new cytotoxic T-lymphocyte epitope peptide of the invention which was incorporated into a Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                 viral infection; virucide; cytostatic; tumor; neoplasm; cell therapy;
antigen; HER-2/neu.
                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Richards JM;
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                                                                                                                                                                                                                                                                                                                                                                                                                                Human HER-2/neu 773-782 cytotoxic T-lymphocyte epitope peptide.
                                                                                                                         100.0%; Score 51; DB 5; Length 10; 100.0%; Pred. No. 0.013; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Peterson PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 3; SEQ ID NO 16; 65pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jackson MR,
                                                                                                                                                                                                                                                                                                                         AEA36306 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ORTH ) ORTHO-MCNEIL PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-NOV-2003; 2003JP-00377653.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2001; 2001US-0270252P
                                                                                                                                                                                                                                                                                                                                                                                               11-AUG-2005 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Moriarty AM,
                                                                                                                                          Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antigen presenting cell.
                                                                                                                                                                                                 1 VMAGVGSPYV 10
                                                                                                                                                                                                                       1 VMAGVGSPYV 10
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                                                                                            Sequence 10 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JP2005139118-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                suspension
                                                                                                                                                                                                                                                                                                                                                              AEA36306;
                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                      Matches
     8888888
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The invention relates to a polypeptide capable of specifically activating cytotoxic T lymphocytes (CTLs) in vivo which can then specifically target calistant cells, or having substantial homology with a CTL spitope, or its sequential subsets. Also included are a population of specific cytotoxic T cells capable of lysing tumour cells displaying a specific cytotoxic T cells capable of lysing tumour cells displaying a specific cytotoxic T cells capable of lysing tumour cells displaying a specific cortivated CTL cells that will target a specific population of cells, specifically cortivated cTLs cells that will target a specific population of cells, specifically cytovoking an immune response to a tumour-associated antigen, identifying specific CTLs response to a tumour-associated antigen, identifying specific CTLs response to a tumour-associated antigen, in a nichody molecule that immunoreacts with the polypeptide and a hybridoma citisque sample, detecting anti-p53 antibodies in an individual, an antibody molecule that immunoreacts with the polypeptide and a hybridoma capable of secreting the above antibodies. The methods are useful for scrivated CTLs and the polypeptide is useful for provoking an immune crivated CTLs and the polypeptide is useful for activating cTLs in vivo with specificity for particular antigenic peptides, and these activated CTLs are useful in the diagnosis and treatment of variety of disease conditions such as cancer, tumours ineoplasia, viral and retroviral infections, and autoimmune ersponse. The tumour associated antigen Herronal antigen dequence is a CTL conditions and antigen the tumour associated antigen Herronal antigen antigen herronal antigen herronal antigen herronal antigen herronal antigen herronal antigen herronal antigen antigen herronal antigen herronal antigen antigen herronal a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel polypeptide useful for activating cytotoxic T lymphocytes in vivo which are useful in the diagnosis and treatment of variety of disease conditions such as cancer, tumors, and neoplasia.
                                                                                                                                                                                                                                                                                                                                         CTL; cytotoxic C lymphocyte; epitope; p53; cytostatic; anti-tumour; virucide; immunosuppressive; vaccine; human; immuno response; tumour-associated antigen; cancer; tumour; neoplasm; viral infection; retrovital infection; autofimune response; Her-2; Neu.
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                                                                                                                                                                                                                                                                                         Human Her-2/Neu-derived CTL epitope HER-7.
                                                                                                                                                 ABU63012 standard; peptide; 10 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 5; Page 52; 77pp; English.
                                                                                                                                                                                                                                             (first entry)
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1 VMAGVGSPYV 10
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Matches 10; Conservat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SHER/) SHERMAN L A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS2003064916-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-AUG-1997;
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                                                                                                                                                                                                                                             16-SEP-2003
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                                                                                                                                                                                               ABU63012;
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100.0%; Score 51; DB 5; Length 10; ilarity 100.0%; Pred. No. 0.013; Conservative 0; Mismatches 0; Indels

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Local Similarity nes 10; Conserv

Matches

Query Match

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The invention describes an immunogenic peptide composition comprising 9 residues including a first conserved residue at a second position from N-terminus, and a second conserved residue at C-terminal position. The inventive peptide composition is used to elicit an immune response against a desired antigen for preventing, treating or diagnosing pathological states, e.g. prostate cancer, hepatitis B, hepatitis C, AlbS, renal carcinoma, lymphoma, cytomegalovirus (CWV), and condlylloma acuminatum. It is also used to treat autoimmune associated disorders, e.g. multiple sclerosis, rheumatoid arthritis, Sjogren syndrome, scleroderma, polymyositis, dermatomyositis, systemic lupus erythematosus, juvenile rheumatoid arthritis, ankylosing spondylitis, myasthenia gravis (MG), bullous pemphigoid, pemphigus, glomerulonephritis, Goodpasture's syndrome, autoimmune hemolytic anemia,
                                                                                                                                                                                                                                                                                    cytostatic; anti-inflammatory; hepatotropic; virucide; anti-HIV; nephrotropic; neuroprotective; antiarthritic; antirheumatic; inflammatory; hepatotropic; antirheumatic; hematological; muscular; nephrotropic; thyromimetic; hematostatic; antithyroid; antithyroid; antionic; anabolic; hypertensive; hepatitis B; hepatitis C; AIDS; renal carcinoma; cervical carcinoma; laymphona; cytomegalovirus; CMV; condlylloma acuminatum; autoimmune associated disorder; multiple sclerosis; rheumatoid arthritis; Sjogren syndrome; scleroderma; polymyositis; dermatomyositis; anxylosing spondyllitis; myasthenia frheumatoid arthritis; anxylosing spondyllitis; myasthenia gravis; MG; bullous pemphigoid; pemphigus; glomerulonephritis; Goodpasture's syndrome; autoimmune haemolytic anaemia; Hashimoto's disease; pernicious anaemia; autoimmune haemolytic anaemia; Hashimoto's disease; pernicious anaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       idiopathic thrombocytopenic purpura, Grave's disease; Addison's disease; human leukocyte anitgen A2.1; HLA A2.1; immunogenic HLA-A2.1 binding peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Immunogenic peptide composition for preventing, treating or diagnosing pathological states, e.g. prostate cancer, hepatitis B and C, Acquired Immunodeficiency Syndrome, and renal carcinoma, includes conserved residues at specified positions.
                                                                                                                                                                                                                                                       Immunogenic HLA-A2.1 binding peptide #238.
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                                                                                                                                    ADE97756 standard; peptide; 10 AA
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93US-00073205.
93US-00159184.
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                                                                                                                                                                                                                (first entry)
VMAGVGSPYV 10
                        VMAGVGSPYV 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GREY/) GREY H M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SIDN/) SIDNEY J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SETTE A.
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04-JUN-1993;
29-NOV-1993;
02-DEC-1994;
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                                                                                                                                                                           ADE97756;
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The invention relates to a novel antigen presentation enhancing hybrid colypeptide. The novel polypeptide has an N-terminal element consisting of 4-16 residues of a mammalian il-Key peptide and its non-N-terminal cof 4-16 residues of a mammalian il-Key peptide and its non-N-terminal deletion modifications, a chemical structure covalently linking the N-terminal element comprises an antigenic epitope of a C-terminal clement. The C-terminal element comprises an antigenic epitope, which binds to an antigenic peptide binding site of an MHC class II molecule. The antigen presentation enhancing hybrid polypeptide has the following cativities: antibacterial, virucide, fungicide, antifheumatic, antidiabetic, and antithyroid. The antigen presentation antidiabetic, and antithyroid. The antigen presentation antidividual and for treating infections (such as bacteria, virus, in an individual and for treating infections (such as bacteria, lupus parasite and fungus), rheumacoid arthritis, multiple sclerosis, lupus crythematosus, diabetes mellitus, myasthenia gravis, autoimmune
                                                                                                                                                                                                         ö
Hashimoto's disease, pernicious anaemia, idiopathic thrombocytopenic purpura, Grave's disease, and Addison's disease. The invention defines positions within a motif enabling the selection of the peptides, which will bind efficiently to human leukocyte anitgen (HLA) A2.1. This is the amino acid sequence of an immunogenic HLA-A2.1 binding peptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel Ii-Key/antigen presentation enhancing hybrid polypeptide, useful for treating infections, rheumatoid arthritis, multiple sclerosis, lupus
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antigen presentation enhancing hybrid polypeptide; mammalian Ii-Key; MHC class II; antibacterial; virucide; fungicide; antirheumatic; antiarthritic; neuroprotective; dermatological; immunosuppressive; antiinflammatory; antidiabetic; antithyroid; immuno rrheumatory; antidiabetic; antithyroid; immuno diabetes mellitus; multiple sclerosis; lupus erythematosus; diabetes mellitus; myasthenia gravis; autoimmune thyroiditis; scleroderma; dermatomyositis; pemphigus.
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                                                                                                                                                                     100.0%; Score 51; DB 8; Length 10; 100.0%; Pred. No. 0.013;
                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MHC class I epitope of human Her-2/neu, 16-6-9.
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17-JUL-2002; 2002US-00197000.
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                                                                                                                                                                                                                10; Conservative
                                                                                                                                                                                                                                                       1 VMAGVGSPYV 10
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                                                                                                                                                                                            Local Similarity
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                                                                                                                                Sequence 10 AA;
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                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                                                 ADM12647
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thyroiditis, scleroderma, dermatomyositis and pemphigus. This sequence represents a mammalian Ii key related peptide epitope of the invention
                                                                                                                                                                                                                                     Gaps
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                                                                                                                        cn 100.0%; Score 51; DB 8; Length 10; 1 Similarity 100.0%; Pred. No. 0.013; 10; Conservative 0; Mismatata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Her-2/neu MHC class II-presented epitope #67.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADO38880 standard; peptide; 10 AA
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Best Local Similarity
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                                                                                                      Sequence 10 AA;
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(I) modified by recombinant DNA techniques comprising: a C-terminal element comprising an MHC Class II-presented epitope; an N-terminal element comprising an Ii-key motif; and an intervening element comprising as sequence of 4-11 amino acid residues where the modification by recombinant DNA techniques taking place within elements (b) and (c) Also described are methods for: suppressing or enhancing an immune response directed toward an MHC (major histocompatibility complex) Class II-

The invention relates to a non-naturally occurring protein or polypeptide

presented epitope of interest. Suppressing an immune response directed toward an MHC Class II-presented epitope of interest comprises: providing a nucleic acid sequence encoding the MHC Class II-presented epitope of interest, the nucleic acid sequence encoding an Ii-Key motif located 4-11 amino acids upstream from the N-terminal residue of the MHC Class II-presented epitope of interest; and modifying the Ii-Key motif to decrease

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insure response directed toward an MHC Class II-presented epitope of inserest comprises: providing a nucleic acid sequence encoding the MHC class II-presented epitope of interest, the nucleic acid sequence lacking an II-key motif located 4-11 amino acids upstream from the N-terminal cresidue of the MHC class II-presented epitope of interest; and modifying the nucleic acid sequence lacking an II-key motif located 4-11 amino acids upstream from the N-terminal cresidue of the MHC class II-presented epitope of interest; and modifying the nucleic acid sequence to introduce an II-key motif appropriately spaced from the MHC class II-presented epitope. The protein or polypeptide of interest corresponds to a protein or polypeptide encoded by an infectious pathogen selected from anthrax, EBOLA, HIV or influenza, preferably vaccinia virus. The non-naturally occurring protein or polypeptide (I) modified by recombinant DNA techniques is useful for polypeptide (I) modified by recombinant DNA techniques is useful for creating infectious agents. It is also useful for treating rheumatoid arthritis, multiple aclerosis, lupus erythematosus, diabetes mellitus, myssthenia gravis, autoimmune thyroiditis, scleroderma, dermatorials, cancer, penphigus, asthma, allergic rhinitis, topical dermatifis, colitis, cancer, psequence of an adenomas. The present sequence represents the amino acid sequence of an
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Query Match 100.0%; Score 51; DB 1; Length 10; Best Local Similarity 100.0%; Pred. No. 0.0097; Matches 10; Conservative 0; Mismatches 0; Indels
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Sequence 29, Appl
Sequence 95, Appl
Sequence 16, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 263, Appl
Sequence 10, Appl
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                                                                                                                                                                                    April 11, 2006, 19:22:50 ; Search time 46 Seconds (without alignments) 17.973 Million cell updates/sec
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                     GenCore version 5.1.7 Copyright (c) 1993 - 2006 Biocceleration Ltd
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/ cgn2_6/ptodata/1/iaa/H_COMB.pep:*

/ cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

/cgn2_6/ptodata/1/iaa/RE_COMB.pep:*
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US-08-444-4178-29
US-08-446-348A-29
US-08-468-5458-29
US-08-46-608-29
US-09-344-608A-16
US-09-543-608A-16
US-09-543-608A-16
US-09-543-608A-16
US-09-527-487-9
US-08-152-338-10
US-08-152-368B-10
US-08-172-368B-10
US-08-412-865-5
US-08-412-865-5
US-08-412-865-5
US-08-441-553-5
US-08-441-553-5
US-08-241-553-5
US-08-241-553-5
US-08-162-368B-9
US-09-162-368B-9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    572060 segs, 82675679 residues
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                       protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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51
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Perfect score:
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Sequence 29, Application US/08467083

Patent No. 5726023

GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/NEU PROTEIN
TITLE OF INVENTION: POR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
TITLE OF INVENTION: HER-2/NEU ONCOGENE IS ASSOCIATED
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry
STREET: 6300 Columbia Center, 701 Fifth Avenue
CITY: Seatile
STATE: Washington
                                                          Sequence
                                                                                                                                                                                                                                                                    Sequence
Sequence
Sequence
Sequence
                     Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:

MEDITUM TYPE: Floppy disk
COMPUTER READABLE FORM:
MEDITUM TYPE: Floppy disk
COMPUTER: IMP PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURSENT APPLICATION DATA:
APPLICATION NUMBER: US 08/414,417
FILING DATE: 06-JUN-1995
CLASSIFICATION NUMBER: US 08/414,417
FILING DATE: 06-JUN-1995
ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/POCKET NUMBER: 92010.448C2
TELECOMMUNICATION NUMBER: 92010.448C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-490
TELERATION POR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 aning acids
US-08-725-736D-8
US-08-725-736D-14
US-08-162-36B-8
US-09-162-36B-14
US-09-161-877B-8
US-09-161-877B-8
US-09-161-877B-14
US-09-100-930A-14
US-09-1334-043D-4
US-09-239-043D-4
US-09-239-043D-4
US-08-725-736D-4
US-08-725-736D-4
US-08-725-736D-4
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US-09-162-368B-4
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Gaps

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IMMUNE REACTIVITY TO HER-2/neu PROTEIN
FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE
HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 10;
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COUNTRY: US

ZIP: 98104-7092

ZIP: 98104-7092

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,545B
FILING DATE: 06-UUN-1995
FILING DATE: 07-UNN-1995
                                          MCDLUGATOR ALLOS MEDILOS COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, Version #1.25 SOFTWARE: Patentin Release #1.0, Version #1.25 CURSENT APPLICATION DATA: PAPLICATION NUMBER: US/08/486,348A PILING DATE: O7-JUN-1995 CLASSIFICATION: 424 ATTORNEY/AGENT INFORMATION: NAME: Sharkey, Richard G: REGISTRATION NUMBER: 92010.448C6 TELEPHONE: (206) 682-601 TELEPHONE: (206) 682-601 INFORMATION FOR SEQ ID NO: 29: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B: Seed and Berry LLP 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 51; DB 1;
Pred. No. 0.0097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PILING DATE: 06-JUN-1995
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCY DOCKEY
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 29, Application US/08468545B
Patent No. 5876712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ô
ZIP: YELL
COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
ALMITTER: IBM PC COMPATIBLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: FOR DIAGN
TITLE OF INVENTION: FOR DIAGN
TITLE OF INVENTION: HER-2/neu
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INFORMATION FOR SEQ ID NO: 3
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.
Matches 10; Conservative
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE: Weathle
                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY:
US-08-486-348A-29
                                                                                                                                Sequence 29, Application US/08414417B
Patent No. 5801005
GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Disis, Mary L.
TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN
TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED
NUMBER OF SEQUENCES: 69
CORRESPONDENCE ADDRESS:
ADDRESSEE: Seed and Berry LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Cheever, Martin A. APPLICANT: Disis, Mary L. TITLE OF INVENTION: IMMUNE REACTIVITY TO HER-2/neu PROTEIN TITLE OF INVENTION: FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED NUMBER OF SEQUENCES: 69
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ZIP: 98104-7092
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,417B
FILING DATE: 31-MAR-1995
CLASSIFICATION: 44.
                                                                                                                                                                                                                                                                                                                                                        B: Seed and Berry LLP
6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3: Seed and Berry LLP
6300 Columbia Center, 701 Fifth Avenue
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION UNDER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C2
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-08-486-348A-29
US-08-486-248A-29
Sequence 29, Application US/08486348A
Patent No. 5846538
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEFAX: (206) 682-697
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.
Matches 10; Conservative
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ADDRESSEE: Seed and
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                              VMAGVGSPYV 10
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                                                                                                                                                                                                                                                                                                                                                                                                                         Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TOPOLOGY: linear
US-08-414-417B-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amino acid
                                                                                                                                                                                                                                                                                                                                                                                                       Seattle
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STATE: Wa
COUNTRY:
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OTHER INFORMATION: Description of Artificial Sequence: Fragment of
CTHER INFORMATION: human protein
US-09-341-982-95
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Chesnut, Robert
APPLICANT: Epimulue Inc.
TITLE OF INVENTION: HLA Class I A2 Tumor Associated Antigen
TITLE OF INVENTION: Peptides and Vaccine Compositions
TITLE REPERENCE: 018623-015-71008
CURRENT APPLICATION NUMBER: US/09/543,608A
CURRENT FILING DATE: 2002-04-05
NUMBER OF SEQ ID NOS: 52
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 16
LENGTH: 10
TITLE OF INVENTION: CYTOTOXIC LYMPHOCYTES, AND USES THEREFOR FILE REFERENCE: SLINGLUPF=3B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Score 51; DB 2; Length 10
100.0%; Pred. No. 0.0097;
Minnerches 0; Indels
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                                                                     CURRENT FILING DATE: 1999-09-20
EARLIER APPLICATION NUMBER: PCT/US98/01592
EARLIER FILING DATE: 1998-01-29
EARLIER FILING DATE: 1997-01-31
NUMBER OF SEQ ID NOS: 104
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 95
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 51; 100.0%; Pred. No.
                                               CURRENT APPLICATION NUMBER: US/09/341,982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 16, Application US/09543608A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Cheever, Martin A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , OTHER INFORMATION: Her2/neu.773
US-09-543-608A-16
                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
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Best Local Similarity 100.
Matches 10; Conservative
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Sequence 29, Application US/08466680B

Sequence 29, Application US/08466680B

Parant No. 607512.

GENERAL INFORMATION:

APPLICANT: Cheever, Martin A.

APPLICANT: Cheever, Martin A.

APPLICANT: Cheever, Martin A.

TITLE OF INVENTION: INMUNE REACTIVITY TO HER-2/neu PROTEIN

TITLE OF INVENTION: POR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE

TITLE OF INVENTION: HER-2/neu ONCOGENE IS ASSOCIATED

NUMBER OF SEQUENCES: 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
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APPLICANT: HUNT, Donald F.
APPLICANT: BNOELHARD, VICTOR H.
APPLICANT: KITLESEN, DAVID
TITLE OF INVENTION: CYSTEINE-DEPLETED PEPTIDES RECOGNIZED BY A3-RESTRICTED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                        100.0%; Score 51; DB 1; Length 10; 100.0%; Pred. No. 0.0097;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2; Length 10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTATE: '092
ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 05/08/466,680B
FILING DATE: 06-404,1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NDDRESSER: .Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 424
CLASSIFICATION: 424
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C4
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 95, Application US/09341982
Patent No. 6558671
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 29:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
Matches 10; Conservative
                                                                                              Best Local Similarity 100
Matches 10; Conservative
                                                                                                                                                                         1 VMAGVGSPYV 10
                                                                                                                                                                                                                    1 WAGVGSPYV 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seattle
Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: linear
    ; TOPOLOGY: linear
US-08-468-545B-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-466-680B-29
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                                                                          Query Match
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APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Grete, Alessandro
APPLICANT: Celis, Esteban
TITLE OF INVENTION: Hies Binding peptides and Their
TITLE OF INVENTION: Uses
NUMBER OF SEQUENCES: 1254
CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and Townsend and Crew LLP
STREET: Two Embarcadero Center, Bighth Floor
CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 100.0%; Score 51; DB 4; Best Local Similarity 100.0%; Pred. No. 0.0097; Matches 10; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: PastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Nicolette, Charles
TITLE OF INVENTION: HERZ ANTIGENIC PEPTIDES
FILE REFRENCE: 126881309200
CURRENT APPLICATION NUMBER: US/09/527,487
CURRENT FILING DATE: 2000-03-16
NUMBER OF SEQ ID NOS: 9
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 263, Application US/08159339A Patent No. 6037135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 9, Application US/09527487
Patent No. 6528060
   REGISTRATION NUMBER: 33,950
                                   REFERENCE/DOCKET NUMBER: 4:
TELECOMMUNICATION INFORMATION
                                                                                                     TELEPHONE: (619) 554-2937
TELEFAX: (619) 554-6312
INFORMATION FOR SEQ ID NO: 12: SEQUENCE CHARACTERISTICS: LENGTH: 10 anino acide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IBM Compatible
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Best Local Similarity 100.
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY: USA
ZIP: 94111-3834
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
                                                                                                                                                                                                                                                                                                                                                                  MOLECULE TYPE: peptide PCT-US95-16415-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 VMAGVGSPYV 10
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ORGANISM: Homo sapiens
US-09-527-487-9
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                                                                                                                                                                                                                                                                                                TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MAGVGSPYV
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US-09-527-487-9
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FOR DIAGNOSIS AND TREATMENT OF MALIGNANCIES IN WHICH THE HER-2/neu ONCOGENE IS ASSOCIATED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
100.0%; Score 51; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0097;
Matches 10; Conservative 0; Mismatches 0; Indels
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GENERAL INFORMATION:
APPLICANT: The Sorippe Research Institute
TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC
TITLE OF INVENTION: CYTOTOXIC T CELLS
NUMBER OF SEQUENCES: 38
CORRESPONDENCE ADDRESS:
ADDRESSEE: The Sorippe Research Institute
STREET: 10666 North Torrey Pines Road, TPC-8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OPERATING SYSTEM: PC-DOS/MS-DOS .
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/354,533
FILING DATE: 15-Jul-1999
CLASSIFICATION: <unimaler control of the control o
                                                                                                                                            ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: PCT/US95/16415 FILING DATE: 13-DEC-1995 CLASSIFICATION: PRIOR APPLICATION: DATA: PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C9
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 29:
                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Ploppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: US 08/355,558
FILING DATE: 14-DEC-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEPHONE: (206) 622-4900
TELEFAX: (206) 682-6031
INFORMATION FOR SEQ ID NO: 29:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: amino acid
STRANDEDNESS: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 10 amino acids
                                                                      NUMBER OF SEQUENCES: 69
                                                                                                                                                                                                                                                                STATE: Washington
                                                                                                                                                                                                                                                                                            COUNTRY: US
ZIP: 98104-7092
                                                                                                                                                                                                                          CITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 VMAGVGSPYV 10
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: California
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE:
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us-09-277-064-12.limited.rai

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APPLICANT: WANG, R.P.; ROSENBERG, S. A.

TITLE OF INVENTION: IDENTIFICATION OF TRP-2 AS

TITLE OF INVENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T

TITLE OF INVENTION: LYMPHOCYTES

TUMBER OF SEQUENCES: 31

CORRESPONDENCE ADDRESS:
ADDRESSE: MORGAN & FINNEGAN, L.L.P.

STREET: 345 PARK AVENUE

CITY: NEW YORK

STATE: NEW YORK

COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                           Length 9;
                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MICROSOFT WORD 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/162,368E
FILING DATE: 28-SEPT-1998
CLASSIFICATION NUMBER: 08/725,736
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/725,736
PRIOR APPLICATION NUMBER: 08/725,736
FILING DATE: 04-OCT-1996
APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: KATHRYN M. BROWN
REGISTRATION NUMBER: 34,556
REFERENCE/DOCKET NUMBER: 2026-4243
TELEPHONE: (212) 751-6849
                                                                                                                                                                                                                LOCATION: TRP-2 PEPTIDE VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.09-162-368B-10
Sequence 10, Application US/09162368B
Patent No. 6083703
                                                                                                                                                                                                                                                                                                                                                           56.9%;
TELEX: 421792
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX: 421792
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                       5; Conservative
                                                                                                                                                                                                                                                                IDENTIFICATION METHOD:

OTHER INFORMATION:

US-08-725-736D-10
                                                                                     TYPE: AMINO ACID
STRANDEDNESS: SINGLE
TOPOLOGY: UNKNOWN
MOLECULE TYPE:
                                                                                                                                                                           DESCRIPTION: PEPTIDE FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS: SINC
TOPOLOGY: UNKNOWN
                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 5; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 MAGVGSPY 9
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Patent No. 5831016
GENERAL INFORMATION:
APPLICANT: WANG, R.; ROSENBERG, S. A.
TITLE OF INVENTION: IDENTIFICATION OF TRP-2 AS
TITLE OF INVENTION: A HUMAN TUMOR ANTIGEN RECOGNIZED BY CYTOTOXIC T
TITLE OF INVENTION: LYMPHOCYTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ZOP: 113.5 GAR ZORD: 2019: 113.5 GAR ZORD: 10154 COMPUTER READABLE FORM: MEDIUM TYPE: FLOPPY DISK COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WORDPERFECT 5.1 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/725,736D FILING DATE: 04-OCT-1996 CLASSIFICATION: 435
                                                                              PRIOR APPLICATION DATA.
APPLICATION NUMBER: US 07/926,666
FILING DATE: 07-AUG-1992
APPLICATION NUMBER: US 08/027,746
FILING DATE: 05-MAR-1993
APPLICATION NUMBER: US 08/103,396
FILING DATE: 06-AUG-1993
ATTORNEY/AGENT INFORMATION:
NAME: Weber, Ellen Lauver
REGISTRATION NUMBER: 32,762
REFERENCE/DOCKET NUMBER: 32,762
TELECPHONE: (415) 576-0300
TELEPRONE: (415) 576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
STREET: 345 PARK AVENUE
CITY: NEW YORK
STATE: NEW YORK
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/159,339A
FILING DATE: 29-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.0%;
Matches 9; Conservative 0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                             TELEX:
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 aming acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: DOROTHY R. AUTH REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MOLECULE TYPE: peptide US-08-159-339A-263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 VMAGVGSPY 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: si
                                         FILING DATE: 2 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      USA
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Gaps
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                                                                                                                                                                       Patent No. 5435100:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: WARUTA, Michio
APPLICANT: SUGINOTO, Toshiyuki
APPLICANT: SUGINOTO, Toshiyuki
APPLICANT: SIVERTION: NON-REDUCING SACCHARIDE-FORMING ENZYME,
TITLE OF INVENTION: AND ITS PREPARATION AND USES
TITLE OF STRIENCES: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 10;
Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                       52.9%; Score 27; DB 1;
83.3%; Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                 STREET: 419 Seventh Street, N.W., Suite 300 CITY: Washington STATE: D.C.
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Search completed: April 11, 2006, 19:24:09 Job time : 46 secs
                                                                                                                                                      Sequence 5, Application US/08172707 Patent No. 5455168
                                                                                                                                                                                                                                                                                                                                                        BROWDY AND NEIMARK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
TELEFAX: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 52.9
Best Local Similarity 83.3
Matches 5; Conservative
5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 248633
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                               2 MAGVGSPY
                                                      : | | | ||
1 LAGPGRPY
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                                                                                                                                                                                                                                                                                                                                                                                                                                              20004
                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-172-707-5
Matches
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                                                                 g
                                                                                                                                                                                                                                                                                                                   Sequence 10, Application US/09161877B
Patent No. 6132980
GENERAL INFORMATION:
APPLICANT: WANG, R.F.; ROSENBERG, S. A.
TITLE OF INVENTION: IDENTIFICATION OF TRP-2
TITLE OF INVENTION: AS A HUMAN TUMOR ANTIGEN RECOGNIZED BY
TITLE OF INVENTION: CYTOTOXIC T LYMPHOCYTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               56.9%; Score 29; DB 2; Length 9; 62.5%; Pred. No. 4.6e+05;
                                                                                                                         Length 9;
                                                                                                                                         4.6e+05;
                                                                                                                       Score 29; DB 2;
Pred. No. 4.6e+05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTY: USA
ZIP: 10154
COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
COMPUTER: IBM FC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: MICROSOFT WORD 97
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/161,8778
FILING DATE: 28-SEPT-1998
CLASSIFICATION DATA:
APPLICATION NUMBER: 08/725,736
FILING DATE: 04-OCT-1996
FILING DATE: 04-OCT-1996
APPLICATION NUMBER: 08/599,602
FILING DATE: 09-FEB-199
ATTORNEY/AGENT INFORMATION:
NAME: KATHENY M. BROWN
REGISTRATION NUMBER: 34,556
REFERENCE/DOCKET NUMBER: 2026-4243USZ
TELECOMMUTICATION INFORMATION:
TELECOMMUTICATION: NUMBER: 34,556
                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 32
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
STREET: 345 PARK AVENUE
CITY: NEW YORK
STATE: NEW YORK
FEATURE:
NAME/KEY: TRP-2 PEPTIDE VARIANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: TRP-2 PEPTIDE VARIANT
                                                                                                                       56.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (212) 758-4800
(212) 751-6849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEX: 421792
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                     Query Match
Best Local Similarity 62.5
Matches 5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IDENTIFICATION METHOD:
CTHER INFORMATION:
US-09-161-877B-10
                               LOCATION:
IDENTIFICATION METHOD:
COTHER INFORMATION:
US-09-162-368B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: SINGLE
TOPOLOGY: UNKNOWN
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DESCRIPTION: PEPTIDE
                                                                                                                                                                                             2 MAGVGSPY 9
                                                                                                                                                                                                                             LAGPGRPY 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AMINO ACID
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Best Local Similarity
                                                                                                                                                                                                                                                                                 RESULT 14
US-09-161-877B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COUNTRY:
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Title: Perfect score:

Sequence:

OM protein

Run on:

Scoring table:

Searched:

Database

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Sequence 49, Application US/08812393A
Publication No. US20010007152A1
GENERAL INFORMATION:
APPLICANT: LUSTGARTEN, Joseph
TITLE OF INVENTION: RECOMBINANT CONSTRUCTS ENCODING
TITLE OF INVENTION: RECOMBINANT CONSTRUCTS ENCODING
TITLE OF INVENTION: ANTIGENS
NUMBER OF SEQUENCES: 64
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORNISON & FOERSTER
STREET: 2000 Pennsylvania Avenue, NW, suite 5500
CITY: Washington
STREET: LOSS AND ADDRESS:
COUNTRY: USA
                                                         Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.0%; Score 51; DB 2; Length 10; Best Local Similarity 100.0%; Pred. No. 0.016; Matches 10; Conservative 0; Mismatches 0; Indels
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ZIP: 20006-1888
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: Diskette
COMPUTER: Diskette
COMPUTER: Diskette
COMPUTER: DOS
SOFTWARE: FREUSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/812,393A
FILING DATE: 05-MAR-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 29,959
REJENSON NUMBER: 29,959
REGISTRATION NUMBER: 29,959
REGISTRATION NUMBER: 29,959
REFERENCE/DOCKET NUMBER: 31333-20001.00
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-887-1800
TELERAM: 202-887-180
US-10-149-138-2351

US-10-149-138-2441

US-10-149-138-3612

US-10-149-138-362

US-10-149-138-60

US-10-149-138-60

US-10-149-138-1413

US-10-149-138-1413

US-10-149-138-1413

US-10-149-138-3129

US-10-149-138-3616

US-10-149-138-3616
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
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US-08-812-393A-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-812-393A-49
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Sequence 12, Appl
Sequence 12, Appl
Sequence 12, Appl
Sequence 49, Appl
Sequence 620, Appl
Sequence 786, App
Sequence 786, App
Sequence 4435, Ap
Sequence 4435, Ap
                                                                                                                                                                                                                                                                                                                                                                                  April 11, 2006, 19:23:29 ; Search time 163 Seconds (without alignments) 25.634 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence Seq
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Sequence
Sequence
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Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence 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                                                               GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
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US-09-277-064-12
US-10-080-013-16
US-10-149-138-786
US-10-149-138-786
US-10-149-138-4335
US-10-149-138-4435
US-10-149-138-4435
US-10-149-138-4435
US-10-149-138-4435
US-10-149-138-4435
US-10-149-138-4435
US-10-149-138-4435
US-10-149-138-4435
US-10-149-138-3352
US-10-149-138-3352
US-10-149-138-3352
US-10-149-138-44335
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1867569 segs, 417829326 residues
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                      protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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51
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Match Length
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Maximum DB seq length: 10
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Score

Result

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Gaps

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Sequence 49, Application US/09774681

Sequence 49, Application US/09774681

Publication No. US20030208780A1

GENERAL INFORMATION:

APPLICANT: Sunol Molecular Corporatiopn

APPLICANT: Sunol Molecular Corporatiopn

TITLE OF INVENTION: RECOMBINANT CONSTRUCTS ENCODING T CELL

TITLE OF INVENTION: UNMERR: US/09/774,681

CURRENT FILING DATE: 1997-03-05

PRIOR FILING DATE: 1997-03-05

PRIOR FILING DATE: 1996-03-05

NUMBER OF SEQ ID NOS: 65

SEQ ID NO 49

LENGTH: 10

LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                             Sequence 12, Application US/09277064

Publication No. US20030064916A1

GENERAL INFORMATION:
APPLICANT: Sherman, Linda A.
TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS
FILE REFERENCE: SCR21528

CURRENT APPLICATION NUMBER: US/09/277,064

CURRENT PELING DATE: 1999-03-26

PRIOR APPLICATION NUMBER: US/09/277,064

CURRENT PELING DATE: 1999-12-14

PRIOR APPLICATION NUMBER: PCT/US95/16415

PRIOR PLING DATE: 1999-12-14

NUMBER OF SEQ ID NOS: 39

SOFTWARE: Patentin Ver. 2.1

LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 51; DB 3; Length 10; 100.0%; Pred. No. 0.016;
                                                                                                                                            DB 3; Length 10;
                                                                                                                                                                                            Mismatches
                                                                                                                                              Score 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; OTHER INFORMATION: Synthesized peptide US-09-774-681-49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                            100.0%;
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ORGANISM: Artificial Sequence
                                                                                                                        Ouery Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10; Conservative
                                                                                                                                                                                                                                         1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                                         1 VMAGVGSPYV 10
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; SEQ ID NO 12; LENGTH: 10; TYPE: PRT; 70 ORGANISM: Homo sapiens US-09-277-074-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-277-064-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
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                                                                                                                                                                Sequence 29, Application US/09354533
Publication No. US20020055614A1
GENERAL INFORMATION:
APPLICANT: Cheever, Martin A.
APPLICANT: Cheever, Mary L.
TITLE OF INVENTION: IMMURE REACTIVITY TO HER-2/neu PROTEIN
HER-2/neu ONCOGENE IS ASSOCIATED
HER-2/neu ONCOGENE IS ASSOCIATED
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US-09-277-074-12

Sequence 12, Application US/09277074

Publication No. US20030022820A1

GENERAL INFORMATION:

APPLICANT: Sherman, Linda A.

TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS

FILE REFERENCE: SCR215S

CURRENT PILING DATE: 1999-03-26

PRIOR FILING DATE: 1994-12-14

PRIOR FILING DATE: 1994-12-14

PRIOR PILING DATE: 1995-12-14

PRIOR PILING DATE: 1995-12-14

NUMBER OF SEQ ID NOS: 39
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE: Seed and Berry LLP
STREET: 6300 Columbia Center, 701 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ouery Match 100.0%; Score 51; DB 3; Best Local Similarity 100.0%; Pred. No. 0.016; Matches 10; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Sharkey, Richard G.
REGISTRATION NUMBER: 32,629
REFERENCE/DOCKET NUMBER: 920010.448C9
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 622-4900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/354,533
FILING DATE: 15-Unl-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
SEQUENCE DESCRIPTION: SEQ ID NO: 29:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 98104-7092
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FELEFAX: (206) 682-6031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 10 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO: 29:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: Seattle
STATE: Washington
                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 63
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
     VMAGVGSPYV 10
                                     VMAGVGSPYV 10
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                                                                                                                     RESULT 2
US-09-354-533-29
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TITLE OF INVENTION: Inducing Cellular Immune Responses to TITLE OF INVENTION: Inducing Cellular Immune Responses to TITLE OF INVENTION: HERZ/neu Using Peptide and Nucleic Acid Compositions FILE REFERENCE: 2060.0140001

CURRENT APPLICATION NUMBER: US/00001

CURRENT FILING DATE: 2000-16-10

PRIOR APPLICATION NUMBER: PCT/US00/33591

PRIOR APPLICATION NUMBER: US 09/458,299

PRIOR FILING DATE: 1999-12-11

NUMBER OF SEQ ID NOS: 4641

SEQ ID NO 786

LENGTH: 10
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CURRENT APPLICATION NUMBER: US/10/149,138
CURRENT FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: PCT/US00/33591
PRIOR APPLICATION NUMBER: US 99/458,299
PRIOR PILING DATE: 1999-12-11
NUMBER OF SEQ ID NOS: 4641
SOFTWARE: Patentin Version 3.1
SEQ ID NO 2352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.016;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Indela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ) OTHER INFORMATION: Artificially Synthesized Peptide
US-10-149-138-786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    , FEATURE:
, OTHER INFORMATION: Artificially Synthesized Peptide
US-10-149-138-2352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2352, Application US/10149138
Publication No. US20040018971A1
GENERAL INFORMATION:
                                                                    Sequence 786, Application US/10149138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
APPLICANT: Celis, Esteban
APPLICANT: Keogh, Elissa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                          Publication No. US20040018971A1
GENERAL INFORMATION:
                                                                                                                                                                 Sette, Alessandro
Sidney, John
Southwood, Scott
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
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Best Local Similarity
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                                                                         Gaps
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APPLICANT: Heiskala, Marja
APPLICANT: Peterson, Per
APPLICANT: Dackson, Michael
TITLE OF INVENTION: A CELL THERAPY METHOD FOR THE TREATMENT OF TUMORS
FILE REFERENCE: ORT-1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: HUMPHREYS, ROBERT
APPLICANT: XU, MINZHEN
TITLE OF INVENTION: 11.-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES
FILE REFERENCE: REH-2013
CURRENT APPLICATION NUMBER: US/10/245,871
CURRENT FILING DATE: 2003-01-09
PRIOR PELING DATE: 2002-07-17
PRIOR PLING DATE: 2002-07-17
PRIOR PLING DATE: 1999-09-14
NUMBER OF SEG ID NOS: 905
SOFTWARE: Patentin Ver: 2.1
SEQ ID NO 620
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                      100.0%; Score 51; DB 3; Length 10; 100.0%; Pred. No. 0.016; tive 0; Mismatches 0; Indels
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100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/080,013
CURRENT FILING DATE: 2002-02-19
NUMBER OF SEQ ID NOS: 42
SOFTWARE: Patentin version 3.1
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-245-871-620
; Sequence 620, Application US/10245871
; Publication No. US20030235594A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                             Sequence 16, Application US/10080013
Publication No. US20030077248A1
                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Moriarty, Ann
APPLICANT: Leturog, Didier
APPLICANT: Degraw, Juli
Query Match
Best Local Similarity 100.
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Best Local Similarity 100.
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Best Local Similarity 100.
Matches 10; Conservative
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                                                                                                                   1 VMAGVGSPYV 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo sapiens
US-10-080-013-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              , ORGANISM; Homo sapiens
US-10-245-871-620
                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
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APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
TITLE OF INVENTION: Inducing Cellular Immune Responses to
TITLE OF INVENTION: HERZ/neu Using Peptide and Nucleic Acid Compositions
FILE REFERENCE, 2060.0140001
CURRENT APPLICATION NUMBER: US/10/149,138
CURRENT FILING DATE: 2002-06-10
PRIOR PPLICATION NUMBER: PCT/US00/33591
PRIOR PLING DATE: 2000-12-11
PRIOR PLING DATE: 2009-12-11
PRIOR PLING DATE: 2009-12-11
NUMBER OF SEQ ID NOS: 4641
SOFTWARE: Patentin version 3.1
SEQ ID NO 4435
LENGTH: 10
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SEQUENCE 620, Application US/10253286

SUBJICATION NO. US20040058881A1

GENERAL INFORMATION:

APPLICANT: HUMPHREYS, ROBERT

APPLICANT: WI, MINZHEN

TITLE OF INVENTION: 11-KEY/ANTIGENIC EPITOPE HYBRID PEPTIDE VACCINES

FILE REPERENCE: REH-2015

CURRENT PILING DATE: 2003-01-13

FRICA PAPLICATION NUMBER: 10/197,000

PRIOR PLING DATE: 2002-07-17

PRIOR PLING DATE: 1999-09-14

NUMBER OF SEQ ID NOS: 905

SOFTWARR: PARENT VET. 2.2.1

SERVICE FILING DATE: 1299-09-14
                                                                                                                         100.0%; Score 51; DB 4; Length 10; 100.0%; Pred. No. 0.016;
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                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
CORGANISM: Artificial Sequence
FEATURE:
COTHER UNDORMATION: Artificial Peptide
US-10-1149-138-4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: Artificial Peptide US-10-149-138-4435
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4435, Application US/10149138 Publication No. US20040018971A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sette, Alessandro
Sidney, John
Southwood, Scott
                                                                                                                            Query Match 100.
Best Local Similarity 100.
Matches 10; Conservative
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Matches 10; Conserve
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                                                                                                                                                                                                                                                                                                            APPLICANT: Sette, Alessandro
APPLICANT: Sette, Alessandro
APPLICANT: Sette, Alessandro
APPLICANT: Schoey, Scott
APPLICANT: Schoey, Scott
APPLICANT: Chésnut, Robert
APPLICANT: Chésnut, Robert
APPLICANT: Chésnut, Robert
APPLICANT: Cells, Bsteaban
APPLICANT: Keogh, Elissa
TITLE OF INVENTION: HER2/neu Using Peptide and Nucleic Acid Compositions
TITLE OF INVENTION: HER2/neu Using Peptide and Nucleic Acid Compositions
FILE REFERENCE: 2060-0140001
CURRENT APPLICATION NUMBER: US/10/149,138
CURRENT FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: US/1800/33591
PRIOR FILING DATE: 1999-12-11
PRIOR FILING DATE: 1999-12-11
NUMBER OF SEQ ID NOS: 4641
SOFTWARE: PatentIn Version 3.1
SEQ ID NO 4335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Sidney, John
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Chesnut, Robert
APPLICANT: Chesnut, Robert
APPLICANT: Celia, Esteban
APPLICANT: Celia, Esteban
APPLICANT: Reogh, Elissa
TITLE OF INVENTION: HER2/neu Using Peptide and Nucleic Acid Compositions
TITLE OF INVENTION: HER2/neu Using Peptide and Nucleic Acid Compositions
FILE REFERENCE: 2060.0140001
CURRENT FILING DATE: 2000-06-10
RIOR APPLICATION NUMBER: US/10/049,138
PRIOR PILING DATE: 1999-12-11
PRIOR PILING DATE: 1999-12-11
PRIOR FILING DATE: 1999-12-11
NUMBER OF SEQ ID NOS: 4641
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100.0%; Pred. No. 0.016;
tive 0; Mismatches 0; Indels
        0; Indels
        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OTHER INFORMATION: Artificial Peptide US-10-149-138-4335
                                                                                                                                                                                                                                   Sequence 4335, Application US/10149138 Publication No. US20040018971A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4422, Application US/10149138 Publication No. US20040018971A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Fikes, John
APPLICANT: Sette, Alessandro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
Matches 10; Conservative
        10; Conservative
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                                                           1 VMAGVGSPYV 10
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        Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: RICHARDS, JOHN.
TITLE OF INVENTION: A CELL THERAPY METHOD FOR THE TREATMENT OF TUMORS FILE REFERENCE: ORT 1342CIP
FILE REFERENCE: ORT 1342CIP
CURRENT PELLING NUMBER: US/10/289,566
CURRENT FILING DATE: 2002-11-07
PRIOR APPLICATION NUMBER: US 60/270,252
PRIOR APPLICATION NUMBER: US 10/080,013
PRIOR PILING DATE: 2001-02-0
PRIOR PILING DATE: 2002-02-19
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PACENTIN VERSION 3.2
SOFTWARE: PACENTIN VERSION 3.2
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: KOSMATOPOULOS, KOSTAS
APPLICANT: TOURDOT, SOPPILE
APPLICANT: SCARINO, Antonio
APPLICANT: GROSS, David, Alexandre
TITLE OF INVENTION: METHOD FOR SCREENING PEPTIDES FOR USE IN
TITLE OF INVENTION: IMMUNOTHERAPY
FILE REFERENCE: 33339/259034
                                                                                          Query Match
100.0%; Score 51; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 10; Conservative 0; Mismatches 0; Indels
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Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/333,430
CURRENT FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: FR 0009591
PRIOR FILING DATE: 2000-07-21
NUMBER OF SEQ ID NOS: 70
SOFFWARE: PAtentin Ver: 2.1
SEQ ID NO 31
LENGTH: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ) OTHER INFORMATION: Synthetic Construct US-10-289-566-16
                                                                                                                                                                                                                                                                                                          RESULT 14
US-10-289-566-16
Sequence 16, Application US/10289566
Publication No. US20040071671A1
GENERAL INFORMATION:
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; Sequence 31, Application US/10333430
; Publication No. US20040072240A1
; GENERAL INFORMATION:
APPLICANT: INSERM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INSTITUT GUSTAVE ROUSSY
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Moriarty, Ann M.
Jackson, Michael R.
Peterson, Per A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Artificial Sequence
PEATURE:
                                                                                                                                                                                                                     1 VMAGVGSPYV 10
                                                                                                                                                                                         1 VMAGVGSPYV 10
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-253-286-620
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100.0%; Score 51; DB 4; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.016;
Matches 10; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                          Search completed: April 11, 2006, 19:26:58 Job time : 164 sec8
; ORGANISM: Artificial sequence
; PEATURE:
; OTHER INFORMATION: Synthetic peptide
US-10-333-430-31
                                                                                                                                                                                                               1 VMAGVGSPYV 10
                                                                                                                                                                                                                                                        1 VMAGVGSPYV 10
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